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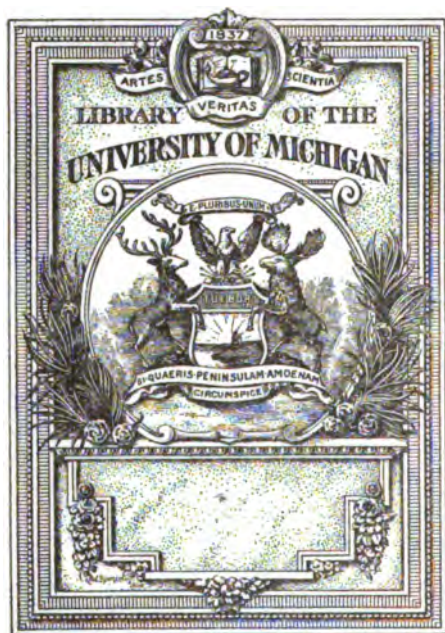
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CATALOGUE
OF
PRINCETON UNIVERSITY



ONE HUNDRED AND FIFTY-SEVENTH YEAR

1903-1904

PRINCETON, NEW JERSEY
PUBLISHED BY THE UNIVERSITY

1903

PRINCETON, N. J.
THE PRINCETON PRESS

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THE DEAN OF THE FACULTY.—Dean's House, Mondays, Tuesdays, Thursdays and Fridays, 2 to 4 P. M.; Wednesdays and Saturdays, 2 to 3 P. M.

THE JOHN C. GREEN SCHOOL OF SCIENCE.—Professor Rockwood, Clerk, 6 and 7 School of Science Building, 12 M. to 1 P. M., Tuesdays and Thursdays.

THE COMMITTEE ON ATTENDANCE meets at noon on Wednesday. Requests and excuses for absence should be presented by the student in person.

THE UNIVERSITY FACULTY meets at 5 o'clock on the Wednesday on or before the seventh day before a meeting of the Board of Trustees; on the first Wednesday of the first term; on the last Wednesday in April.

THE ACADEMIC FACULTY meets on the first and third, and the SCHOOL OF SCIENCE FACULTY on the second and fourth Wednesdays of the month during term time; these meetings are at 5 o'clock, except when a University Faculty meeting occurs on the same day, when the meeting of the Academic and School of Science Faculty is at 4 o'clock.

For Catalogues of Princeton University apply to C. W. MCALPIN, Secretary of the University, Princeton, New Jersey.

For information concerning Entrance and Courses of Instruction apply to H. N. VAN DYKE, Registrar of the University, Princeton, New Jersey.

For information concerning the Graduate School apply to PROFESSOR A. F. WEST, Dean of the Graduate School, Princeton, New Jersey.

CALENDAR

1903

- Sept. 22, 23.* Examinations for admission and the removal of entrance conditions, in Princeton only.
- Sept. 23.* First terms begins. Opening exercises at 3 P. M.
- Sept. 28, 29.* Examinations for removal of first and second term conditions.
- Sept. 30.* Preliminary examinations of candidates for Doctor's degree.
- Oct. 21.* Meeting of the Board of Trustees.
- Oct. 22.* Commemoration Day.
- Oct. 26-31.* Second opportunity for removal of second term conditions.
- Nov. 26.* Thanksgiving Day.
- Dec. 10.* Meeting of the Board of Trustees.
- Dec. 23, 12.30 P. M.* Christmas vacations begins.

1904

- Jan. 6.* Christmas vacation ends.
- Jan. 11-16.* Examinations for removal of entrance conditions.
- Feb. 10.* First term examinations end.
- Feb. 11.* Second term begins.
- Feb. 22.* Washington's Birthday.
- Mar. 10.* Meeting of the Board of Trustees.
- Mar. 14-19.* Examinations for removal of first term conditions.
- Mar. 31, 12.30 P. M.—Apr. 5, 11 A. M.* Spring recess.
- Apr. 11-16.* Examinations for removal of entrance conditions.

- May 18, 12 M.* Meeting of Faculty Committee on Schedule of Studies.
- May 28.* End of Senior final examinations.
- June 10.* End of examinations of the three lower classes.
- June 11.* Junior Orator and Maclean Prize contests.
- June 13.* Class Day.
- June 13-15.* Commencement meeting of the Board of Trustees.
- June 14.* Election of Alumni Trustee—Annual meeting of Literary Societies and Alumni Association—Lynde Prize Debate.
- June 15.* 157th Annual Commencement.
- June 16-18.* Examinations for admission, held simultaneously in Princeton and elsewhere.
- Sept. 19-21.* Examinations for admission and the removal of entrance conditions, in Princeton only.
- Sept. 21.* First term begins. Opening exercises at 3 P. M.
- Sept. 26-27.* Examinations for removal of first and second term conditions.
- Sept. 28.* Preliminary examinations of candidates for Doctor's degree.
- Oct. 21.* Meeting of the Board of Trustees.
- Oct. 22.* Commemoration Day.
- Oct. 26-31.* Second opportunity for removal of second term conditions.
- Nov. 24.* Thanksgiving Day.
- Dec. 8.* Meeting of the Board of Trustees.
- Dec. 21, 12.30 P. M.* Christmas vacation begins.

1905

- Jan. 4.* Christmas vacation ends.
- Jan. 9-14.* Examinations for removal of entrance conditions.

- Feb. 8.* First term examinations end.
Feb. 9. Second term begins.
Feb. 22. Washington's Birthday.
Mar. 9. Meeting of the Board of Trustees.
Mar. 13-18. Examinations for removal of first term conditions.
Apr. 20, 12.30 P. M.—Apr. 25, 11 A. M. Spring recess.
May 1-6. Examinations for removal of entrance conditions.
May 17, 12 M. Meeting of Faculty Committee on Schedule of Studies.
May 27. End of Senior final examinations.
June 9. End of examinations of the three lower classes.
June 10. Junior Orator and Maclean Prize contests.
June 12. Class Day.
June 12. Commencement meeting of the Board of Trustees.
June 13. Election of Alumni Trustee—Annual meeting of Literary Societies and Alumni Association—Lynde Prize Debate.
June 14. 157th Annual Commencement.

FACULTY MEETINGS, 1903-1904

(Schedule revised)

Wednesdays at 5 o'clock.

UNIVERSITY FACULTY: September 23, October 7, November 4, December 2, January 6, February 3, March 2, April 6, May 4, June 1.

ACADEMIC FACULTY: September 30, October 21, November 11, 25, December 16, January 20, February 10, 24, March 16, 30, April 20, May 11, 25.

SCHOOL OF SCIENCE FACULTY: October 14, 28, November 18, December 9, January 13, 27, February 17, March 9, 23, April 13, 27, May 18, June 8.

UNIVERSITY CALENDAR

JULY, 1903							AUGUST, 1903							SEPTEMBER, 1903						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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5	6	7	8	9	10	11	8	9	10	11	12	13	14	13	14	15	16	17	18	19
12	13	14	15	16	17	18	15	16	17	18	19	20	21	20	21	22	23	24	25	26
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26	27	28	29	30	31		29	30	31											
OCTOBER, 1903							NOVEMBER, 1903							DECEMBER, 1903						
4	5	6	7	8	9	10	1	2	3	4	5	6	7	6	7	8	9	10	11	12
11	12	13	14	15	16	17	8	9	10	11	12	13	14	13	14	15	16	17	18	19
18	19	20	21	22	23	24	15	16	17	18	19	20	21	20	21	22	23	24	25	26
25	26	27	28	29	30	31	22	23	24	25	26	27	28	27	28	29	30	31		
JANUARY, 1904							FEBRUARY, 1904							MARCH, 1904						
3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12
10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19
17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26
24	25	26	27	28	29	30	28	29						27	28	29	30	31		
31																				
APRIL, 1904							MAY, 1904							JUNE, 1904						
3	4	5	6	7	8	9	1	2	3	4	5	6	7	5	6	7	8	9	10	11
10	11	12	13	14	15	16	8	9	10	11	12	13	14	12	13	14	15	16	17	18
17	18	19	20	21	22	23	15	16	17	18	19	20	21	19	20	21	22	23	24	25
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JULY, 1904							AUGUST, 1904							SEPTEMBER, 1904						
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31																				
OCTOBER, 1904							NOVEMBER, 1904							DECEMBER, 1904						
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9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
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JANUARY, 1905							FEBRUARY, 1905							MARCH, 1905						
1	2	3	4	5	6	7	5	6	7	8	9	10	11	5	6	7	8	9	10	11
8	9	10	11	12	13	14	12	13	14	15	16	17	18	12	13	14	15	16	17	18
15	16	17	18	19	20	21	19	20	21	22	23	24	25	19	20	21	22	23	24	25
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29	30	31																		
APRIL, 1905							MAY, 1905							JUNE, 1905						
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	
30																				

Days upon which the University is not in session are *italicised*.

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PART II

**HISTORY AND GOVERNMENT OF
THE UNIVERSITY**

HISTORY AND GOVERNMENT OF THE UNIVERSITY

At the beginning of the eighteenth century there were but three institutions of higher learning in the colonies; Harvard and Yale in New England, and the College of William and Mary in Virginia.

The coming of William Tennent, Sr., to America in 1716, exerted a wide influence upon religious and educational affairs. Tennent was born in Ireland in 1673 and received a liberal education at the University of Edinburgh, from which he was graduated in 1695. A few years later he was ordained a priest in the Church of Ireland. Becoming dissatisfied with the terms imposed upon the Episcopal clergy he was deprived of his living, and so came to America. He was admitted to the Synod of Philadelphia in 1718, and labored at East Chester and Bedford in New York until 1721, when he removed to the county of Bucks in Pennsylvania, and again, in 1726, to a point afterwards called the Forks of Neshaminy. Here he established a school which later became well known as the Log College. In this school were educated many whose names are intimately associated with the founding and early history of Princeton University. Among them may be noted Gilbert Tennent, John Blair, Samuel Blair, Samuel Finley, and Charles Beatty, whose lives bear the imprint of the zeal and teaching of the elder Tennent.

For a brief season the Log College flourished, but its work was over with the death of its founder in 1746. The growing need for an educational institution organized on a plan far larger than the school of Tennent became apparent. The success of the graduates of the Log College, who showed themselves equal to the positions usually occupied by graduates of the New England colleges or of the Scottish universities, proved to the people of the middle colonies that they need not be dependent upon distant seminaries of learning for an educated ministry. The first movement toward the permanent establishment of a college was begun in 1739 by the Synod of Philadelphia, which nominated a committee of four, "two of which, if they can be prevailed upon, to be sent home to Europe to prosecute this affair with proper directions." This committee was composed of Messrs. Pemberton, Dickinson, Cross and Anderson; two of whom, Ebenezer Pemberton and Jonathan Dickinson, were natives of New England. The former was graduated from Harvard and the latter from Yale. Dr. Anderson was from Scotland, and Cross was from Ireland. The committee entered at once upon its labors, but the times were not propitious. The outbreak of the war between England and Spain rendered the voyage abroad one of considerable hazard and danger; the calling of the Synod together for further consideration of the plan was abandoned and "the whole affair laid aside for a time." This was the last action taken by the united Church upon the subject.

A conflict which had been growing within the Synod finally led to its division in 1742. The separation grew out of the activity and the conflicting opinions of two factions as to the value of religious revivals, and the learning requisite for admission to the ministry. One was the party of the Log College, whose pupils were the leading men in the Presbytery of New Brunswick; the other had its strength in

the more conservative Presbytery of Philadelphia. Between these two parties stood the Presbytery of New York, led by Dickinson and Pemberton. Sincere and earnest efforts were made by the latter to effect a reconciliation, but to no purpose, and, inasmuch as the two parties could not be brought to an amicable understanding, the Presbytery of New York deemed it their duty to withdraw and organize another and separate synod. This was afterward duly accomplished by the union of the Presbyteries of New York, New Brunswick and New Castle.

After the schism, Dickinson, Pierson, Pemberton, Burr, and others, of the newly-formed Synod of New York, not satisfied with the limited course of instruction given at the Log College, turned their thoughts toward the establishment of an institution, in which ample provision should be made for a wide and liberal education. Convinced of the futility of awaiting united synodical action, and of the evils which would arise from the supervision of a church judicatory, they determined upon independent though concerted action. They sought a charter for the founding of a college in New Jersey, without assistance from either synod, which they "probably neither sought nor desired." The charter was granted and on the 22d of October, 1746, passed the great seal of the Province, attested by John Hamilton, President of his Majesty's Council, then acting Governor of New Jersey. A memorandum to this effect appears among the records of charters and commissions in the office of the Secretary of State, but the charter itself is not given. Its substance, however, is revealed in an advertisement which appeared in the *Pennsylvania Gazette* of August 13, 1747, which is as follows :

Philadelphia, August 13, 1746-7.

These are to give Notice to all concerned, That by His Majesty's Royal Charter for erecting a college in New-Jersey, for the instructing of youth in the learned languages, and in the liberal arts and

sciences, bearing date October 22d, 1746, Messrs. William Smith, Peter Vanbrugh Livingston, William Peartree Smith, gent. and Messrs. Jonathan Dickenson, John Pierson, Ebenezer Pemberton, and Aaron Burr, ministers of the gospel, are appointed trustees of the said college; with full power to any four or more of them, to chuse five more trustees to the exercise of equal power and authority in the said college, with themselves. By virtue of which power, the said trustees, nominated in the charter, have chosen the Rev. Messrs. Gilbert Tennant, William Tennant, Samuel Blair, Richard Treat, and Samuel Finley, as trustees of the said college of New-Jersey:

Which trustees are by the said charter, constituted a body corporate and politick, both in fact and name, with full power to act as such to all intents and Purposes, and rendred capable of a perpetual succession to continue forever. By which royal charter, there is authority given to the major part of any seven or more of the said trustees, and their successors conven'd for that purpose, to purchase, receive, and dispose of any possessions, tenements, goods and chattels, gifts, legacies, donations and bequests, rents, profits and annuities of any kind whatsoever, and to build any house or houses, as they shall think proper, for the use of the said college. And also by the said charter is given to the major part of any seven or more of the said trustees and their successors, full power to chuse, and at pleasure to displace, a president, tutors, professors, treasurer, clerk, steward, and usher, with any other ministers, and officers as are usual in any of the universities or colleges in the realm of Great Britain.

And also by the said charter is given to the major part of any seven of the said trustees and their successors, full power to make any laws, acts and ordinances, for the government of the said college, as are not repugnant to the laws and Statutes of the realm of Great Britain, nor to the Laws of the Province of New-Jersey; provided, that no person be debarred any of the privileges of the said college on account of any speculative principles of religion; but those of every religious profession, having equal privilege and advantage of education in the said college. And also by the said charter, power is given to the major part of any seven of the said trustees and their successors, by their president, or any other appointed by them, to give any such degrees as are given in any of the universities or col-

leges in the realm of Great Britain, to any such as they shall judge qualified for such degrees; and power to have and use a common seal to seal and confirm diplomas or certificates of such degrees, or for any other use which they shall think proper.

And these may further notify all concern'd, that the said trustees have chosen the Rev. Mr. Jonathan Dickinson president, whose superior Abilities are well known; and Mr. Caleb Smith tutor of the said college; and that the college is now actually opened, to be kept at Elizabeth-Town, till a building can be erected in a more central place of the said province for the residence of the Students; that all who are qualified for it, may be immediately admitted to an academick education, and to such class and station in the college, as they are found upon examination to deserve; and that the charge of the college to each student, will be Four Pounds a year New-Jersey money, at Eight Shillings per ounce, and no more.

In this memorandum of the first charter, it will be seen that the remaining five Trustees, elected by the first named seven, were all, save Richard Treat, leading men of the Log College. With the death of its venerable founder, William Tennent, Sr., which occurred May 6, 1746, the work of the Log College was over and its forces represented by the Tennents, Samuel Blair, and Samuel Finley, were absorbed by the younger but more liberal institution. In casting in their lot with the Trustees of the College of New Jersey, the supporters of the Log College were probably influenced by a knowledge of the narrow scope and aims of the little academy they had fostered and its utter inability to meet the then existing requirements for an institution of the higher learning.

A second charter was granted two years later by Jonathan Belcher, royal Governor of New Jersey, and passed the seal of the Province on the 14th of September, 1748. So far as appears, the scope and educational design of the institution, the powers of the Trustees, and the degrees to be granted, were precisely the same in both instruments. The text of the second charter is as follows :

CHARTER OF THE TRUSTEES OF THE COLLEGE OF NEW JERSEY

George the Second by the Grace of God of Great Britain France and Ireland King Defender of the Faith etc. TO ALL TO WHOM these presents shall come GREETING. WHEREAS sundry of our loving Subjects, well disposed and publick spirited Persons, have lately by their humble petition, presented to our trusty and well beloved Jonathan Belcher Esquire Governor and Commander in Chief of our province of New Jersey in America, represented the great Necessity of coming into some Method for encouraging and promoting a learned Education of our Youth in New Jersey, and have expressed their earnest Desire that a College may be erected in our said province of New Jersey in America, for the Benefit of the Inhabitants of the said Province and others, wherein Youth may be instructed in the learned Languages, and in the liberal Arts and Sciences. **AND WHEREAS** by the fundamental Concessions made at the first Settlement of New Jersey by the Lord Berkeley and Sir George Carteret then proprietors thereof, and granted under their Hands and the seal of the Said Province, bearing Date the Tenth Day of February in the Year of our Lord one thousand six hundred and Sixty four, it was, among other things conceded and agreed that "no Freeman within the said Province of New Jersey should at any time be molested, punished, disquieted, or called in Question for any difference in Opinion or Practice in Matters of religious Government, who do not actually disturb the civil peace of the said province, but that all and every such Person or Persons might from time to time and at all times thereafter freely and fully have and enjoy his and their judgments and Consciences, in Matters of Religion throughout the said Province they behaveing themselves peaceable and quietly and not using this Liberty to Licentiousness, nor to the civil Injury or outward disturbance of others." As by the said Concessions on Record in the Secretary's Office of New Jersey at Perth Amboy in Lib. 3 Folio 66 &c, may appear. **WHEREFORE**, and for that the said Petitioners have also expressed their earnest Desire that those of every religious Denomination may have free and equal Liberty and Advantages of Education in the said College, any different Sentiments in Religion notwithstanding: **WE** being, willing to grant the

reasonable Request and Prayers of all our loving Subjects and to promote a liberal and learned Education among them. **KNOW YE THEREFORE THAT WE**, considering the Premises, and being willing for the future that the best Means of Education be established in our said Province of New Jersey for the Benefit and Advantage of the Inhabitants of our said Province and others; **DO**, of our special Grace certain Knowledge and mere Motion, by these Presents will, ordain, grant and constitute, that there be a College erected in our said Province of New Jersey, for the Education of Youth in the learned Languages and in the liberal Arts and Sciences, and that the Trustees of the Said College and their Successors for ever may and shall be one Body Corporate and politick in Deed Action and Name, and Shall be called and named, and distinguished by the Name of **THE TRUSTEES OF THE COLLEGE OF NEW JERSEY**. **AND** further, wee have willed given granted constituted and appointed, And this by our present **CHARTER** of our special Grace, certain Knowledge and mere Motion, **WE DO**, for us our Heirs and Successors, will, give, grant, constitute and ordain that there shall in the said College from henceforth for ever be a Body politick, consisting of Trustees of the said College of New Jersey. **AND**, for the more full and perfect Erection of the said Corporation and Body Politick consisting of Trustees of the College of New Jersey **WE** of our especial Grace, certain Knowledge and mere Motion, **DO** by these presents for us our Heirs and Successors create, make, ordain, constitute nominate, and appoint the Governor, and Commander in Chief of our said Province of New Jersey for the Time being, and also our trusty and well beloved John Reading, James Hude, Andrew Johnston, Thomas Leonard, John Kinsey, Edward Shippen, and William Smith Esquires, Peter Van Brugh Livingston, William Peartree Smith and Samuel Hazard Gentlemen, John Pierson, Ebenezer Pemberton, Joseph Lamb, Gilbert Tennent, William Tennent, Richard Treat, Samuel Blair, David Cowel, Aaron Burr, Timothy Jones, Thomas Arthur, Jacob Green, Ministers of the Gospel, to be Trustees of the said College of New Jersey. [Repealed clause relative to oaths omitted.] **THAT** no Meeting of the Trustees Shall be Valid or legal for doing any Business whatsoever unless the Clerk has duly and legally notified each and every Member of the Corporation, of such Meeting, and that before the entering on any Business the Clerk

shall certify such Notification under his Hand to the Board of Trustees. THAT the said Trustees have full Power and Authority, or any thirteen [number changed] or greater Number of them, to elect nominate and appoint, and associate unto them any Number of Persons as Trustees, upon any Vacancy, so that the whole number of the Trustees exceed not twenty-three [altered to twenty-seven], whereof the president of the said College for the Time being to be chosen as hereafter mentioned, to be one, and twelve of the Said Trustees to be always Such persons as are Inhabitants of our said Province of New Jersey. AND WE DO FURTHER of our especial Grace, certain Knowledge, and meer Motion, for us our Heirs and Successors, will, give grant, and appoint, that the said Trustees and their Successors shall for ever here after be, in Deed, Fact, and Name a Body Corporate and Politick, and that they the said Body Corporate and Politick Shall be known and distinguished in all Deeds, Grants, Bargains, Sales, Writings, Evidences, Muniments, or otherwise howsoever, and, in all Courts for ever hereafter, plead and be impleaded by the Name of the Trustees of the College of New Jersey. AND that they the said Corporation, by the Name aforesaid, Shall be able, and in Law capable, for the use of the said College to have, get, acquire, purchase, receive, and possess Lands, Tenements, Hereditaments, Jurisdictions and Franchises for themselves, and their Successors, in Fee Simple or otherwise howsoever ; AND to purchase receive or build any House or Houses, or any Other Buildings as they Shall think needfull or convenient for the Use of the Said College of New Jersey, and in such Place or places in New Jersey, as they the said Trustees shall agree upon. AND also to receive and dispose of any Goods, Chatties and other things of what Nature soever for the Use aforesaid, and receive any Rents, Profits, Annuities, Gifts, Legacies, Donations, and Bequests of any kind whatsoever for the Use aforesaid, so nevertheless the yearly clear Value of the Premises do not exceed the sum of two thousand Pounds Sterling [amount changed]. AND therewith or otherwise to support and pay (as the said Trustees and their Successors or the major Part of such of them as (according to the Provision herein afterwards) are regularly convened for that purpose shall agree and see Cause) the President, Tutors, and other Officers or Minister of the said College, their respective annual Salaries or Allowance and all such other necessary and contingent Charges as from

time to time Shall arise and accrue relating to the Said College. AND also to grant, bargain, Sell, let, set, or assign, Lands Tenements, or Hereditaments Goods or Chattles, contract or do all other things whatsoever, by the Name aforesaid and for the Use aforesaid, in as full and ample Manner to all Intents and Purposes, as any natural Person or other Body Politick or Corporate is able to do, by the Laws of our Realm of Great Britain or of our said Province of New Jersey. AND OF OUR FURTHER Grace, certain Knowledge, and meer Motion, to the Intent that our said Corporation and Body Politick may answer the end of their Erection and Constitution, and may have perpetual Succession and continue for ever. We do for us our Heirs and Successors hereby will, give, and grant unto the said Trustees of the College of New Jersey, and to their Successors for ever, that when Any thirteen [number changed, and so below wherever thirteen stands] of the said Trustees or of their Successors are convened and met together as aforesaid for the Service of the said College, the Governor and Commander in Chief of our said Province of New Jersey, and in his Absence the President of the said College, and in the absence of the said Governor and President, the eldest Trustee present at such Meeting, from time to time, Shall be president of the said Trustees at all their Meetings, and at any time or times such thirteen Trustees convened and met as aforesaid Shall be capable to act as fully and amply to all Intents and Purposes, as if all the Trustees of the said College were personally present. PROVIDED always that a Majority of the said thirteen Trustees be of the said Province of New Jersey, except, after regular Notice they fail of coming, in which Case those that are present are hereby impowered to act, the different place of their Abode notwithstanding, and all affairs and Actions whatsoever under the Care of the said Trustees shall be determined by the Majority or greater Number of those thirteen so convened and met together, the President whereof shall have no more than a single vote. AND WE DO for us our Heirs and Successors hereby will, give, and grant full Power and Authority to any six or more of the said Trustees to call Meetings of the said Trustees from time to time and to order Notice to the said Trustees of the Times and Places of Meeting for the Service aforesaid. AND ALSO WE DO hereby for us our Heirs and Successors, will, give, and grant to the said Trustees of the College of New Jersey, and to

their Successors for ever, that the Said Trustees, do elect nominate, and appoint such a qualified Person as they or a major Part of any thirteen of them, convened for that purpose as above directed, Shall think fit, to be the President of the said College, and to have the immediate Care of the Education and Government of such Students as shall be sent to, and admitted into the said College for Instruction and Education. AND ALSO that the said Trustees do elect nominate and appoint so many Tutors and Professors to assist the President of the said College, in the Education and Government of the Students belonging to it, as they the said Trustees or their Successors or the major part of any thirteen of them, which shall convene for that purpose as above directed, Shall from time to time and at any time hereafter think needful and serviceable to the Interests of the said College.

AND ALSO THAT THE SAID TRUSTEES AND THEIR SUCCESSORS, or the major Part of any thirteen of them, which shall convene for that purpose as above directed, Shall at any time displace and discharge from the Service of the said College, such President Tutors and Professors, and to elect others in their Room and Stead AND ALSO that the said Trustees or their Successors, or the major Part of any thirteen of them which Shall convene for that Purpose as above directed, do from time to time as occasion Shall require, elect, constitute and appoint a Treasurer, a Clerk, an Usher, and a Steward for the said College, and appoint to them and each of them their respective Business and Trusts, and displace and discharge, from the Service of said College, such Treasurer, Clerk, Usher, or Steward, and to elect others in their Room and Stead, which President, Tutors, Professors, Treasurer, Clerk, Usher, and Steward, so elected and appointed, WE DO for us our Heirs and Successors, by these Presents constitute and establish in their several Offices, and do give them and every of them full Power and Authority to exercise the same in the said College of New Jersey, according to the Direction and during the Pleasure of the said Trustees, as fully and freely as any other the like Officers in our Universities or any of our Colleges in our Realm of Great Britain lawfully may and ought to do. AND ALSO that the said Trustees and their Successors or the major Part of any thirteen of them, which shall convene for that Purpose as above directed, as often as one or more of the said Trustees Shall

happen to dye, or by removal or Otherwise Shall become unfit or incapable according to their Judgment to serve the Interest of the said College, do, as soon as conveniently may be after the Death, Removal, or such Unfitness or Incapacity of such Trustee or Trustees to serve the Interest of the said College, elect and appoint such other Trustee or Trustees as shall supply the place of him or them so dying, or Otherwise becoming unfit or incapable to serve the Interest of the said College; and every Trustee so elected and appointed, Shall by Vertue of these presents and of such Election and Appointment be vested with all the Power and Privileges which any of the other Trustees of the said College are hereby invested with, AND WE DO FURTHER of our especial Grace, certain Knowledge and meer Motion, will, give, and grant, and by these Presents do, for us our Heirs and Successors, will, give, and grant, unto the said Trustees of the College of New Jersey, that they and their Successors, or the major Part of any thirteen of them, which Shall convene for that Purpose, as above directed, may make, and they are hereby fully empowered from Time to Time, freely and lawfully to make and establish such Ordinances, Orders, and Laws, as may tend to the good and wholesome Government of the said College, and all the Students and the several officers and Ministers thereof, and to the public Benefit of the same, not repugnant to the Laws and Statutes of our Realm of Great Britain or of this our Province of New Jersey, and not excluding any Person of any religious Denomination, whatsoever from free and equal Liberty and Advantage of Education, or from any of the Liberties Privileges or Immunities of the said College on Account of his or their being of a religious profession different from the said Trustees of the said College, and Such Ordinances, Orders, and Laws, which Shall be so as aforesaid made, WE DO by these Presents for us our Heirs and Successors ratify, allow of, and confirm as good and effectual to oblige and bind all the said Students, and the several Officers and Ministers of the said College, AND WE DO hereby authorize and empower the said Trustees of the College, and the President, Tutors and Professors by them elected and appointed to put such Ordinances and Laws in Execution to all Proper Intents and Purposes. AND WE DO FURTHER of our especial Grace, certain Knowledge, and meer Motion, will, give, and grant, unto the said Trustees of the College of New Jersey that for the Encourage-

ment of Learning and animating the Students of the said College to Diligence Industry and a laudable Progress in Literature, that they and their Successors, or the major Part of any thirteen of them convened for that Purpose as above directed, do, by the President of the said College for the time being or by any other deputed by them give and grant any such Degree and Degrees to any of the Students of the said College, or to any others by them thought worthy thereof as are usually granted in either of our Universities or any other College in our Realm of Great Britain, and that they do sign and seal Diplomas or Certificates of such Graduations to be kept by the Graduates as Perpetual Memorials or Testimonials thereof. AND FURTHER of our especial Grace, certain Knowledge, and meer Motion, WE DO by these Presents for us our Heirs and Successors give and grant unto the Said Trustees of the College of New Jersey and to their Successors, that they and their Successors Shall have a common Seal under which they may pass all Diplomas and Certificates of Degrees, and all other the Affairs and Business of and concerning the said Corporation, or of and concerning the said College of New Jersey, which shall be engraven in Such Form and with such Inscription as Shall be devised by the said Trustees of the said College, or the major Part of any thirteen of them, convened for the Service of the said College as above directed. AND WE DO FURTHER for us our Heirs and Successors give and grant unto the said Trustees of the College of New Jersey and their Successors, or the major Part of any thirteen of them, convened for the Service of the College as above directed, full Power and Authority from time to time to nominate and appoint all other inferior Officers and Ministers which they shall think to be convenient and necessary for the Use of the College, not herein particularly named, or mentioned, and which are accustomed in our Universities, or in any of our Colleges in our Realm of Great Britain, which Officers or Ministers we do hereby empower to execute their Offices or Trusts as fully and freely as any other the like officers or Ministers in any of our Universities, or any other College in our Realm of Great Britain lawfully may or ought to do.

AND LASTLY our express Will and Pleasure is, and we do by these Presents for us our Heirs and Successors, give and grant unto the said Trustees of the College of New Jersey, and to their Suc-

cessors forever, that these our Letters Patent or the Enrollment thereof shall be good and effectual in the Law to all Intents and Purposes, against us our Heirs and Successors, without any other License, Grant, or Confirmation, from us our Heirs and Successors hereafter by the said Trustees to be had or obtained ; Notwithstanding the not reciting or Misrecital, or not naming or mis-naming of the aforesaid Offices, Franchises, Privileges, Immunities, or other the Premises or any of them, and notwithstanding a Writ of Ad quod Damnum hath not issued forth to enquire of the premises or any of them, before the ensealing hereof ; Any Statute, Act, Ordinance or Provision, or any other Matter or thing to the contrary notwithstanding. TO have hold and enjoy all the singular the Privileges, Advantages, Liberties, Immunities, and all other the Premises herein and hereby granted and given or which are meant mentioned or intended to be herein and hereby given and granted unto them the said Trustees of the said College of New Jersey and to their Successors forever. IN TESTIMONY whereof We have caused these our Letters to be made Patent, and the Great Seal of our said Province of New Jersey to be hereunto affixed. WITNESS our trusty and well beloved JONATHAN BELCHER Esquire Governor and Commander in Chief of our said Province of New Jersey this fourteenth day of September in the twenty second Year of our Reign, and in the Year of our Lord one thousand seven hundred and forty eight.

I have perused and Considered the within Charter of Incorporation, and find nothing Contained therein Inconsistent with his Majesty's Interest or the Honor of the Crown.

J. WARRELL, *At Genll.*

September ye 13th. 1748.—This charter having been read in Council was consented to and approved of.

CHA. READ, *Cl. Con.*

Lett the Great Seal of the Province of New Jersey be Affixed to this Charter.

J. BELCHER.

To the Secretary of the Province of New Jersey.

The second charter had been sought by the original Trustees in order to increase their number, to give other religious communions a share in the administration, and to

make the lay Trustees equal in number to those who were clergymen. Numerous doubts, besides, had been expressed as to the validity of the first charter, which had been granted by the President of the Council, then acting governor, and which had never been recorded *verbatim* in the records of the Secretary of State. The interest taken by Governor Belcher in the affairs of the institution and the wise forethought of its founders, by the execution of the second and more comprehensive document, effectually removed all doubts as to the validity of their powers. After the Revolution this charter was confirmed and renewed by the Legislature of the State of New Jersey.

After the granting of the first charter measures were at once taken to open the College, and on February 2, 1747, a notice appeared in the *New York Gazette Revived in the Weekly Post Boy*, notifying "any Person or Persons who are qualified by preparatory Learning for Admission, that some time in May next at latest they may be there admitted to an Academic Education." On the 20th of April, the following notice was given through the same journal :

This is to inform the Publick, That the Trustees of the College of New-Jersey, have appointed the Reverend Mr. Jonathan Dickinson, President of the said College; which will be opened the fourth week in May next, at Elizabeth-Town: At which Time and Place, all Persons suitably qualified, may be admitted to an Academic Education.

Hatfield, in his *History of Elizabeth*, states that "the first term of the College of New Jersey was opened at Mr. Dickinson's house, on the south side of the old Rahway road, directly west of Race street." President Dickinson's term of administration was brief, commencing on the fourth week in May, 1747, and closing with his death, which occurred October 7, 1747. Upon his decease the Rev. Aaron Burr assumed the charge of the College, which was removed from Elizabethtown to Newark. To Burr belongs

the credit for the organization of the curriculum, the ceremonies of the College, and its discipline.

The first Commencement was held at Newark, November 9, 1748, and was celebrated with much ceremony. This occasion had been somewhat delayed owing to the desire of Governor Belcher to there present the Trustees with the second charter, which could not sooner be completed. The *New York Gazette Revived in the Weekly Post Boy* published an account of the proceedings of this Commencement in detail, together with the inaugural address of President Burr, with the following endorsement: "As the Acts of a publick Commencement are little known in these Parts, perhaps the following Relation from an Eye and Ear Witness, may be agreeable to many of our Readers." The President, in his address, emphasized the need of a broad and liberal education as the firmest foundation of the Commonwealth, and concluded with an eulogy upon the generosity of their patron, Governor Belcher. The graduating class numbered six.

A set of laws for the government of the College, probably prepared by Burr, were adopted by the Trustees at this time. One, relating to the admission of students, gives a fair idea of the entrance requirements of the period:

1. None may be expected to be admitted into College but such as being examined by the President and Tutors shall be found able to render Virgil and Tully's Orations into English; and to turn English into true and grammatical Latin; and to be so well acquainted with the Greek as to render any part of the four Evangelists in that language into Latin or English; and to give the grammatical connection of the words.

The Trustees also announced "That the annual Commencement for the future be on the last Wednesday of September, and that the next Commencement be held at New Brunswick." A majority of the Board appear to have favored New Brunswick as a permanent location for the

College, and in this way hoped to interest the inhabitants to the end that pecuniary aid might be forthcoming for the erection of suitable buildings. The need of funds being urgent, application was made to the Provincial Assembly for authority to raise by a lottery a sum not exceeding eight thousand dollars, but the request was denied and the lottery was transferred to Philadelphia. Several years later, in 1761-2, the Assembly granted this privilege, as did also the General Court of Connecticut (1753-4).

In casting about for a desirable site for the location of the Institution, the situation of Princeton at once commended itself. Not only was it midway between the cities of New York and Philadelphia and its one street a part of the great highway between them, but it occupied a central position upon rising ground, insuring healthful surroundings, on the line dividing East and West Jersey. Here, among the first foothills of the Appalachians, a settlement had been made so early as 1696, called Prince-town, probably because it was near neighbor to the older village of Kingstown. New Brunswick, because of its greater size and somewhat similar though not so favorable location, claimed the first consideration ; but the Trustees, well aware of the pecuniary value of a college to any town in which it should be placed, were desirous of securing the full advantage accruing from this fact, and voted, September 26, 1750:

That a proposal Be made to the Towns of Brunswick and Prince-Town to try what Sum of Money They can Raise for Building of the College by the next meeting that the trustees may Be Better able to Judge in Which of these places to fix the place of the College.

At the next meeting of the Board, held in Trenton, May 15, 1751, the following resolution was adopted :

Voted that New-Brunswick be ye Place for the Building of the College, provided the Inhabitants of sd. Place agree with the Trustees upon the following Terms, Viz. that they secure to the College

a Thousandd Pounds proc. Money, ten acres of land contiguous to the College, and two hundred acres of Wood Land, the furthest Part of it not to be more than three Miles distant from the Town; or such a Quantity of Wood Land as the Trustees of the College shall judge Equivalent to two hundred Acres of Wood Land offered to be given by some gentleman in Prince Town.

Mr. Jonathan Sergeant, the Treasurer, was ordered to view the land at Princeton and New Brunswick and report to the Board. The citizens of the latter place do not appear to have been eager to accept the terms imposed by the Board, and, failing to comply by the time allowed, it was voted, September 27, 1752:

That the College be fixed at Princeton upon Condition that the Inhabitants of sd. Place secure to the Trustees that two Hundred Acres of Woodland, and that ten Acres of clear'd Land which Mr. Sergeant view'd; and also one thousand Pounds proc. Money.

This action finally settled the vexed question of location, and, the citizens of the town having complied with the terms proposed by the Board, steps were at once taken for the erection of the first college building. The plans drawn by Dr. Shippen and Robert Smith were accepted by the Trustees. These, according to the Minutes of July 22, 1754, specified "That the College be built of Brick if good Brick can be made at Princeton & if Sand can be got reasonably cheap. That it be three story high & without any Cellar;" but at a subsequent meeting it was decided that stone be used for the College edifice. The land for this building was given by Nathaniel Fitz Randolph, who also donated twenty pounds currency. Ground was broken on the 29th of July, 1754, under the direction of Joseph Morrow, and soon afterward the corner-stone was laid, in the presence of Thomas Leonard, John Stockton, John Horner, William Worth (stone mason), Nathaniel Fitz Randolph, and many others. It was the purpose of the Trustees to name the new building after the patron and benefactor of

the College, Governor Belcher, but with rare modesty he declined the honor, requesting the Board to call the edifice "Nassau Hall," as expressing "the Honour we retain, in this remote Part of the Globe to the immortal Memory of the Glorious King William the 3d., who was a Branch of the illustrious House of NASSAU." This request was complied with in the following terms :

Whereas his Excellency Govr. Belcher has signified to us, his declining to have the Edifice we have lately erected at Princeton for the Use and Service of New-Jersey College to be called after his Name, and has desired and for Good Reasons that it should be call'd after the Name of the illustrious House of NASSAU ; It is therefore voted, and is hereby ordered that the sd. Edifice be in all Time to come called and be known by the Name of NASSAU HALL.

The College was completed and the students removed from Newark to Princeton in the fall of 1756. The expenses incurred consequent upon the erection of so considerable a building, then the largest structure of its kind in the colonies, had prompted the Board, in 1753, to send the Rev. Gilbert Tennent and the Rev. Samuel Davies to Great Britain to solicit funds in behalf of the Institution. This undertaking was successful, and the money acquired sufficient to defray in part the cost of the building.

The death of President Burr occurred September 24, 1757, and three days later the Trustees at their stated meeting elected the Rev. Jonathan Edwards, of Stockbridge, Massachusetts, to fill the vacancy. The administration of President Burr was one of marked progress in the development of the College, and to him belongs the credit, in a great measure, of the successful establishment of the Institution and the organization of its curriculum and discipline.

President Edwards, after some delay, arrived at Princeton on the 16th of February, 1758, and assumed the duties

of his office. One week later he was inoculated for small-pox and died on the 22d of March. On the ninth of May, 1759, the Rev. Samuel Davies was elected to the Presidency and on the 26th of July entered upon the duties of his office. Mr. Davies was probably graduated from the Log College and was considered, "next to Whitefield, the most eloquent preacher of his age." He died February 4, 1761.

During his administration there were no material changes in the course of instruction; more attention, however, was given to the cultivation of English composition and elocution. President Davies gave much of his time to the building up of a suitable library for the College. A catalogue of the books in the library was prepared, with a preface by Davies, setting forth "The Design of the Publication," and asserting that "A large and well-sorted Collection of Books on the Various Branches of Literature is the most ornamental and useful Furniture of a College; and the most proper and valuable Fund with which it can be endowed." Text-books were also imported from London for the use of the students, and placed in the hands of the Steward for sale.

The Rev. Samuel Finley had been proposed for the Presidency at the meeting at which Davies was elected, and upon the death of the latter he was unanimously chosen as his successor. His administration lasted until the 17th of July, 1766, the date of his death. During this period the course of instruction remained the same as in former years, and the College maintained a steady growth.

On the 19th of November, 1766, the Trustees elected to the Presidency, John Witherspoon, D.D., LL.D., of Paisley, Scotland. Dr. Witherspoon at first declined; a year later, however, he accepted a reelection and became sixth President of the College of New Jersey.

Witherspoon arrived in America during the summer of 1768 and was inaugurated on the 17th of August. The

shadow of the Revolution was already lengthening over the Colonies, and in this important crisis Witherspoon brought to the aid of his adopted land, whose cause he openly and boldly espoused, "political talents of the very highest order, and personal traits which made his immigration to the country an inestimable blessing to the struggling Colonists. He was bold and influential as an agitator; active with his pen and his voice; one of the foremost of the party of action; not only ready for a declaration of independence, but earnest in his advocacy of it (De Witt)." New Jersey was the destined battle ground of the Revolution and it needed the shrewd wit and strong hand of the great Scotchman to carry the College safely through the stormy days that followed. Among the students of this period (1770), were many who afterward were leading figures in the great struggle and in the constitutional problem which at the close of the war offered itself to every thoughtful mind. James Madison, Aaron Burr, Gunning Bedford, William Bradford, Philip Freneau, Hugh Henry Brackenridge, Henry Lee, Morgan Lewis, and Henry Brockholst Livingston were some of the pupils over whom Witherspoon was called to preside.

The spirit of resistance which the passage of the Stamp Act had provoked was nowhere more manifest than at Princeton. In 1765 the Senior class voted to appear at the Commencement dressed in American manufactures. This example was also followed by the undergraduates. In January, 1774, to show their patriotism, the students burned the Steward's winter store of tea, the effigy of Governor Hutchinson of Massachusetts sharing a like fate having a tea-canister tied about his neck.

For nearly eight years the varying fortunes of the Revolution told heavily on the College. The course of instruction was interrupted by the presence of both armies, Nassau Hall was wrecked, the library scattered and destroyed, and the philosophical apparatus, including the famous orrery

made by Joseph Rittenhouse of Philadelphia, ruined. During this period but one Commencement was omitted, that of 1777. The members of the graduating class, however, seven in number, received their degrees a few months later and are accounted graduates for that year.

During the battle of Princeton, January 3, 1777, a part of the Fortieth Regiment (British) remained in their barracks within the walls of Nassau Hall. Captain Hamilton's battery was ordered to dislodge them and several shots were sent into the building. One of these, tradition hath it, entering the chapel passed through the head of the portrait of King George the Second hanging upon the wall. The British quickly surrendered and 194 gave themselves up prisoners of war.

College orders were regularly resumed after the enemy had abandoned their occupation of the State, although, according to President Witherspoon's report, given through the public papers in 1779, the number of students did not at any time exceed ten. In the summer of 1783 a mutinous body of soldiers surrounding the State House in Philadelphia where Congress was sitting, caused that body to retire to Princeton and for a time Nassau Hall became the capitol of the Nation. The Commencement of 1783 is rendered notable in the annals of the College, from the attendance of General Washington, the National Congress, and the Marquis de la Luzerne, Minister from France.

The impoverished condition of the country consequent upon the war of the Revolution, laid a heavy burden upon the shoulders of the President and Trustees. Great credit is due to the perseverance and untiring energy displayed by Witherspoon throughout his administration in meeting and overcoming these difficulties. President Witherspoon died November 15, 1794.

Samuel Stanhope Smith, D.D., LL.D., a graduate of the College in the class of 1769, who succeeded Dr. Withers-

spoon, was elected to the Presidency May 6, 1795. During his term of office the course of instruction was broadened and the curriculum enlarged. Among the most important changes of this kind was the establishment of a professorship in chemistry. This was the first provision for regular instruction in this branch of science made by an American college. A grant of six hundred pounds per annum for three years was secured from the Legislature of the State, to reimburse the College for the damage sustained to its buildings, library, and philosophical apparatus during the Revolution. This appropriation, however, was not equal by a thousand dollars to the expense of repairing the philosophical apparatus.

On the 6th of March, 1802, Nassau Hall was destroyed, save for the outer walls, by fire together with almost the entire library and part of the philosophical apparatus. Steps were at once taken to raise funds wherewith to repair the loss, and an elaborate address "To the Inhabitants of the United States" was prepared by the Trustees and sent far and wide. In this appeal they were so far successful that by the 4th of April, 1804, more than forty-four thousand dollars had been collected. The rebuilding of Nassau Hall was completed during the summer of 1804.

Dr. Smith resigned the Presidency August 14, 1812, and was succeeded by Ashbel Green, D.D., LL.D., a graduate of the College (1783). Dr. Green's administration closed September 25, 1822, at which time he tendered his resignation to the Trustees. During this period of ten years the institution maintained a steady growth, both in the number of students and in the income from its invested funds.

On the 26th of September, 1822, the Trustees elected to the Presidency the Rev. John Holt Rice of Richmond, Virginia. Dr. Rice, being in ill-health, declined and the duties of the office for a time devolved upon the Vice-President, Philip Lindsley.

James Carnahan, D.D., LL.D., of the Class of 1800, was elected upon the 12th of May, 1823, and was inaugurated President August 5th of that year. President Carnahan's term of office was one of marked increase in the growth and development of the College. During his administration of thirty-one years, sixteen hundred and thirty-four students were graduated from the institution; the teaching corps was increased from two professors and two tutors, in 1823, to six professors, two assistant professors, and four tutors in 1854, and not less than seventy-five thousand dollars expended in the erection of new buildings, the purchase of apparatus and books, and the improvement of the College grounds.

A department of law was established in 1846, under the direction of the Hon. Joseph C. Hornblower, Chief Justice of the Supreme Court of New Jersey; James S. Green, and Richard S. Field, Attorneys. The degree of Bachelor of Laws was given for two years' residence study. There being no funds available for the support of this department the lectures were abandoned in 1852. During this period the degree of Bachelor of Laws was conferred upon seven.

President Carnahan resigned in 1853, but upon the request of the Board retained the office until the Commencement of 1854.

John Maclean, D.D., LL.D., was elected to the Presidency December 20, 1853, and inaugurated Wednesday, June 28, 1854. Dr. Maclean resigned December 11, 1867, retaining the office until the Commencement of 1868. During this period the number of students increased from 247 in 1854, to 281 in 1868. The Civil War deprived the institution of a large proportion of its students and is largely responsible for the small increase. Four new professorships were established, having a total endowment of \$195,000, and the teaching corps increased to twenty. The movement to establish free scholarships in the College, under-

taken during the last years of President Carnahan's administration, was successful in obtaining \$60,000. The interior of Nassau Hall was destroyed by fire for the second time on the night of the 10th of March, 1855. The damage to the building, the walls alone standing, amounted to above \$50,000, upon which there was an insurance of \$12,000. The work of rebuilding Nassau Hall was completed during the spring of 1860.

James McCosh, D.D., LL.D., Litt.D., of Queen's College, Belfast, was elected President of the College on the 29th of April, 1868. Dr. McCosh resigned the office in 1888, after an administration of twenty years. Under President McCosh the number of students increased from 281 in 1868, to 603 in 1887. Gifts amounting to upwards of three millions of dollars were contributed during this period, of which one million was expended in the erection of fourteen buildings. Among the more important changes in the curriculum were the introduction of the system of elective studies (1870); and the founding of the John C. Green School of Science (1873), offering courses leading to the degree of Bachelor of Science, Civil Engineer, and Master of Science; and the establishment of the Graduate Department (1877). The Faculty was enlarged from ten professors and seven tutors in 1868, to thirty-one professors, four assistant professors, and five tutors and instructors—a total of forty—in 1888.

Francis Landey Patton, D.D., LL.D., twelfth President of the College of New Jersey, was elected February 9, 1888, and inaugurated June 20, 1888. President Patton resigned the office June 9, 1902. During his administration of fourteen years the student enrolment increased from 603 in 1888, to 1354 in 1902. The Faculty numbered forty in 1888; in 1902, one hundred. Seventeen new buildings were erected during President Patton's incumbency.

In October, 1896, the one hundred and fiftieth anniversary of the signing of the First Charter of the College of New Jersey was celebrated; on the anniversary day, October 22, 1896, the title of Princeton University was assumed.

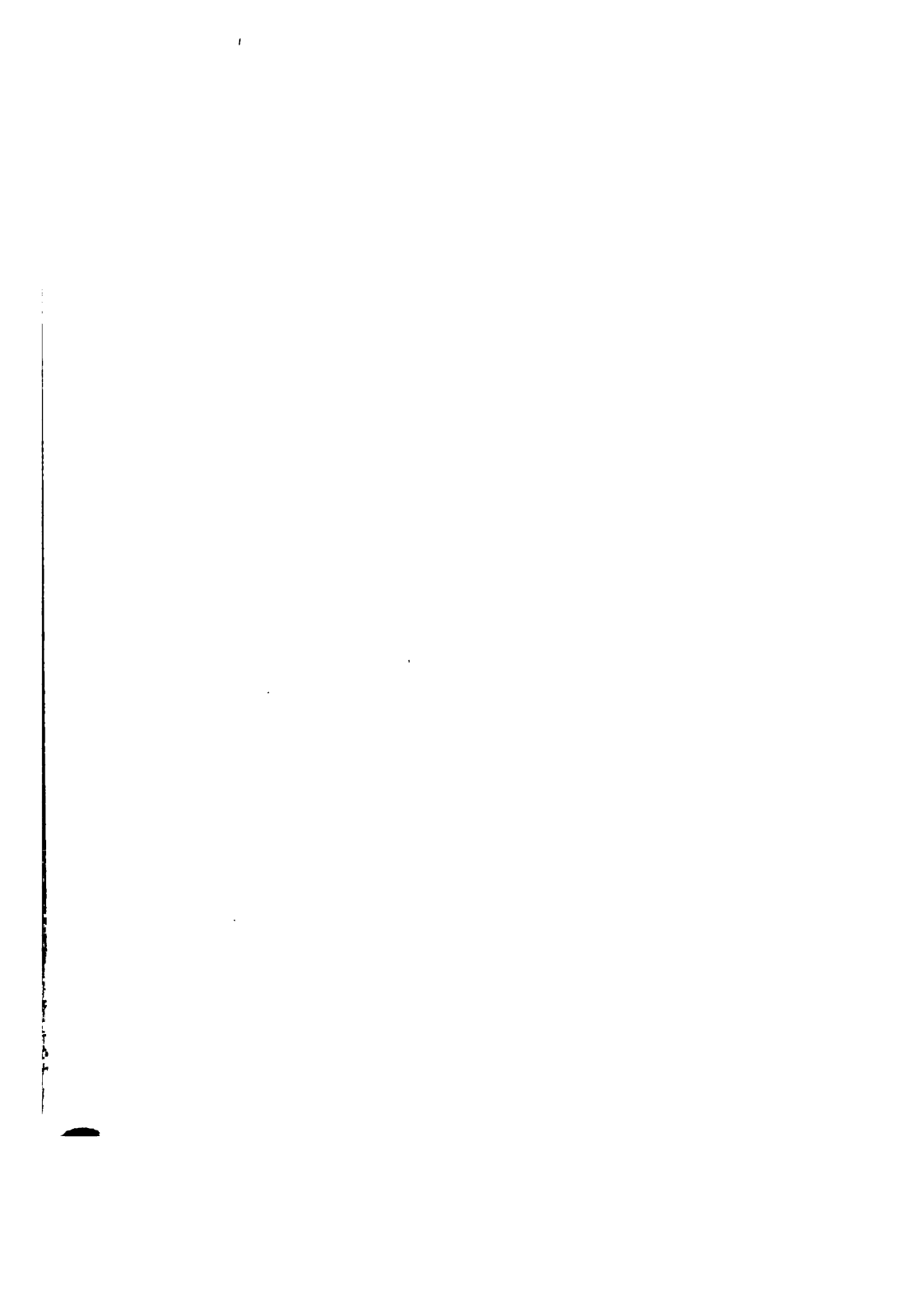
In 1900 a plan for Alumni Representation in the Board of Trustees was adopted. By this plan five Trustees were added to the Board, who hold office for five years (except those elected at the first election on June 11th, 1901) and are known as "Alumni Trustees"; one Trustee is elected yearly. No one is eligible for election as an Alumni Trustee excepting a graduate of Princeton University of not less than ten years' standing; all graduates of Princeton University of three years' standing who duly enroll are entitled to vote for Alumni Trustees. Nominations are made each year between the first day of January and the first day of April; the election takes place in Princeton on Tuesday of Commencement week, and votes may be cast either in person or by mail.

The title of the Corporation as now constituted is The Trustees of Princeton University.

Woodrow Wilson, Ph.D., Litt.D., LL.D., was elected to the Presidency in June, 1902, and inaugurated on the 25th of October of the same year.

PART III

DEPARTMENTS OF THE UNIVERSITY



ACADEMIC DEPARTMENT

FACULTY

WOODROW WILSON, PH.D., LITT.D., LL.D., *President, McCormick Professor of Jurisprudence and Politics.*

FRANCIS LANDEY PATTON, D.D., LL.D., *Ex-President, Stuart Professor of Ethics and the Philosophy of Religion.*

HENRY BURCHARD FINE, PH.D., *Dean of the Faculty, Dod Professor of Mathematics.*

HENRY CLAY CAMERON, PH.D., D.D., *Professor Emeritus of Greek Language and Literature.*

CHARLES WOODRUFF SHIELDS, D.D., LL.D., *Professor Emeritus of the Harmony of Science and Revealed Religion.*

WILLIAM ALFRED PACKARD, PH.D., D.D., *Kennedy Professor of Latin Language and Literature and the Science of Language.*

CHARLES AUGUSTUS YOUNG, PH.D., LL.D., *Professor of Astronomy.*

S. STANHOPE ORRIS, PH.D., L.H.D., *Professor Emeritus of Greek Language and Literature and Instructor in Greek Philosophy.*

THEODORE WHITEFIELD HUNT, PH.D., L.H.D., *Professor of English Language and Literature.*

GEORGE LANSING RAYMOND, L.H.D., *Professor of Aesthetics.*

SAMUEL ROSS WINANS, PH.D., *Professor of Greek and Instructor in Sanskrit.*

WILLIAM LIBBEY, D.Sc., *Professor of Physical Geography.*

WILLIAM BERRYMAN SCOTT, PH.D., *Blair Professor of Geology.*

WILLIAM COWPER PRIME, LL.D., *Professor of the History of Art.*

ALLAN MARQUAND, PH.D., L.H.D., *Professor of Archaeology and the History of Art.*

ANDREW FLEMING WEST, PH.D., LL.D., HON. D.LITT. (OXON.), *Dean of the Graduate School, Giger Professor of Latin.*

- ALEXANDER THOMAS ORMOND, PH.D., LL.D., *McCosh Professor of Philosophy.*
- ARTHUR LINCOLN FROTHINGHAM, JR., PH.D., *Professor of Ancient History and Archaeology.*
- JOHN HOWELL WESTCOTT, PH.D., *Musgrave Professor of Latin and Tutor in Roman Law.*
- WILLIAM FRANCIS MAGIE, PH.D., *Clerk of the Faculty, Professor of Physics.*
- JAMES MARK BALDWIN, PH.D., HON. D.SC. (Oxon.), LL.D., *Stuart Professor of Psychology.*
- HENRY DALLAS THOMPSON, D.SC., PH.D., *Professor of Mathematics.*
- GEORGE MCLEAN HARPER, PH.D., *Holmes Professor of Belles Lettres and English Language and Literature.*
- WINTHROP MORE DANIELS, A.M., *Professor of Political Economy.*
- JOHN GRIER HIBBEN, PH.D., *Stuart Professor of Logic.*
- ARNOLD GUYOT CAMERON, PH.D., *Woodhull Professor of French.*
- PAUL VAN DYKE, D.D., *Professor of History.*
- HENRY VAN DYKE, D.D., LL.D., *Murray Professor of English Literature.*
- GEORGE STEVENSON PATTON, A.M., *Professor of Moral Philosophy.*
- HOWARD CROSBY WARREN, A.M., *Professor of Experimental Psychology.*
- EDMUND YARD ROBBINS, A.M., *Professor of Greek.*
- JESSE BENEDICT CARTER, PH.D., *Professor of Latin.*
- JOHN PRESTON HOSKINS, PH.D., *Professor of German.*
- WILLIAMSON UPDIKE VREELAND, D. ÈS L., *Assistant Professor of Romance Languages.*
- JOHN HAUGHTON CONEY, A.M., *Assistant Professor of History.*
- HARRY FRANKLIN COVINGTON, A.M., *Assistant Professor of Oratory.*
- ULRIC DAHLGREN, A.B., M.S., *Assistant Professor of Histology.*
- STOCKTON AXSON, A.M., *Assistant Professor of English.*
- WILLIAM KELLY PRENTICE, PH.D., *Assistant Professor of Greek.*
- MAX FRIEDRICH BLAU, PH.D., *Assistant Professor of German.*
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INSTRUCTORS

ALBERT HARRIS WILSON, M.S., *Instructor in Mathematics.*

WILLIAM GILLESPIE, PH.D., *Instructor in Mathematics.*

BAYARD TUCKERMAN, A.B., *Lecturer on English Literature.*

EDWARD GRAHAME ELLIOTT, PH.D., *Instructor in Jurisprudence and Politics.*

JACOB NEWTON BEAM, A.M., *Instructor in German.*

DAVID MAGIE, JR., A.M., *Instructor in Latin.*

MARCUS STULTS FARR, D.Sc., *Assistant in Geology.*

LUTHER PFAHLER EISENHART, PH.D., *Instructor in Mathematics.*

LAURENCE HUTTON, A.M., *Lecturer on English Literature.*

HARDIN CRAIG, PH.D., *Instructor in English.*

HERBERT DOUGLAS AUSTIN, A.M., *Instructor in Latin and Italian.*

ENNO LITTMANN, PH.D., *Instructor in Semitic Philology.*

HOWARD CROSBY BUTLER, A.M., *Lecturer on Architecture.*

ALFRED ALEXANDER WOODHULL, M.D., LL.D., *Lecturer on Personal Hygiene and General Sanitation.*

HOWELL NORTH WHITE, A.M., *Instructor in Latin.*

EDWIN MOORE RANKIN, PH.D., *Instructor in Latin.*

JOHN GALE HUN, PH.D., *Instructor in Mathematics.*

GILBERT VAN INGEN, *Assistant in Geology.*

LEWIS FREDERIC PEASE, A.B., *Lecturer on Music.*

FRED LE ROY HUTSON, A.B., *Instructor in Greek.*

JOHN PORTER HALL, A.B., *Instructor in Greek.*

HORACE MEYER KALLEN, A.B., *Instructor in English.*

JOHN EDWARD WALLACE WALLIN, PH.D., *Demonstrator in Experimental Psychology.*

TERMS OF ADMISSION

ENTRANCE EXAMINATIONS

All candidates for examination in Princeton must report at the Faculty Room in the University Offices the evening before the examination begins or on their arrival the following morning. Examinations for admission will be written, with supplementary oral examinations if needed. The first examination will begin in Princeton, on Thursday, June 16th, 1904, at 9 A. M., and will continue through Saturday forenoon. The second will begin on Monday, September 19th, 1904, at 2 P. M. Applicants who have any conditions or other deficiencies from the June examination are required to remove them at the September examinations. *Attendance is required at the beginning of the examinations.*

Simultaneously with the June entrance examinations in Princeton, examinations will also be held in the cities of New York, Philadelphia, Pittsburg, Albany, Buffalo, Chicago, Cincinnati, Cleveland, Columbus, Denver, Harrisburg, Indianapolis, Kansas City, Louisville, Newark, Omaha, Portland, Ore., St. Louis, St. Paul, San Antonio, Scranton, Syracuse, Washington, Wilkes-Barre, and at such preparatory schools and other cities as the number of candidates or the distance from other places of examination may justify. The places in which the examinations are to be held can be learned by application to the Registrar.

Examinations at other times are inconvenient and often impracticable, and applicants for examination on other than the regular days must obtain previous permission by writing

to the Registrar, and are required to pay \$10 into the treasury.

All candidates for admission to any class, or as special students, must bring with them testimonials of good moral character, preferably from their last instructors, and if the candidate has been a member of another college or university, he must produce a certificate from its President or Faculty that he is free from censure in that institution.

Each applicant for admission should be provided with a statement, signed by his teacher, as to his fitness to be examined in each of the subjects specified in the following list which he offers. The statement is merely for the information of the examiners, and is in no sense an admission certificate.

No candidate is admitted into the Undergraduate Department without examination and a vote of the Faculty.

PRELIMINARY EXAMINATIONS

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. Certificates as to preparation in the subjects in which the candidate wishes to be examined should be presented.

ACADEMIC FRESHMAN ENTRANCE REQUIREMENTS

The following entrance requirements are drawn in accordance with recommendations of the National Educational Association and of the College Entrance Examination Board. It is recommended that candidates be prepared for examination on the requirements as specified, but equivalents will be accepted. The University will in all cases be the judge of the equivalence of subjects offered as substitutes for the specified requirements.

In the subjoined list of subjects, the following constitute the requirements which are expected of all candidates: 1, 2, 3, 4, 5, 6, 7, 8; 15, 16, 17, 18; 23 (or 25); 27, 28, and 29.

N. B.—For maximum requirements leading to advanced standing in French, see French 24, page 76, and in German, see German 26, page 77. Papers will be regularly set in French 23, and in German 25. Candidates desiring to offer either French 24, or German 25, must notify the Registrar on or before May 1st, preceding the examinations.

ENGLISH

1. *English.* The examination will be based upon the books prescribed by the uniform entrance requirements in English. Questions as to the subject matter, structure, and style of these books will be asked. Candidates must be prepared in all of the books required for the year of entrance. For 1904, 1905, and 1906, the books prescribed are:

a. For reading, *Shakespeare's* The Merchant of Venice and Macbeth, The Sir Roger de Coverley Papers in The Spectator, *Coleridge's* The Ancient Mariner, *Scott's* Ivanhoe and Lady of the Lake, *Tennyson's* Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur, *Lowell's* The Vision of Sir Launfal, *George Eliot's* Silas Marner, *Irving's* Life of Goldsmith:

b. For careful study, *Shakespeare's* Julius Cæsar, *Milton's* Lycidas, Comus, L'Allegro, and Il Penseroso, *Burke's* Speech of Conciliation with America, *Macaulay's* Life of Samuel Johnson, and Addison.

HISTORY

2. *Ancient History.* For the present the requirement will be restricted to Greek history to the death of Alexander the Great, and Roman history to the accession of Com-

ENGLISH ENTRANCE REQUIREMENTS FOR 1904 AND 1905

The list of books for reading and for careful study, printed upon pages 72 and 156, is for the years 1906, 1907 and 1908. The list for 1904 and 1905 is as follows:

- a. For reading, *Shakespeare's* The Merchant of Venice and Julius Caesar, *The* Sir Roger de Coverley Papers in The Spectator, *Goldsmith's* The Vicar of Wakefield, *Coleridge's* The Ancient Mariner, *Scott's* Ivanhoe, *Carlyle's* Essay on Burns, *Tennyson's* The Princess, *Lowell's* The Vision of Sir Launfal, *George Eliot's* Silas Marner.
- b. For careful study, *Shakespeare's* Macbeth, *Milton's* Lycidas, Comus, L'Allegro, and Il Penseroso, *Burke's* Speech on Conciliation with America, *Macaulay's* Essays on Milton and Addison.

the same way, the \mathcal{H}^1 -norm of \mathbf{u}_h is bounded by the \mathcal{H}^1 -norm of \mathbf{u} plus a constant depending on h .

For the L^2 -norm, we use the following lemma, which is a consequence of the Bramble-Hilbert lemma (see, e.g., [10, 11]).

Lemma 2.1. *Let $\mathbf{u} \in \mathcal{H}^1(\Omega)$ and let $\mathbf{u}_h \in \mathcal{H}^1(\Omega)$ be the piecewise linear approximation of \mathbf{u} on the mesh \mathcal{T}_h . Then, for any $h \in \mathcal{H}$, it holds that*

$$\|\mathbf{u} - \mathbf{u}_h\|_{L^2(\Omega)} \leq C h |\mathbf{u}|_{\mathcal{H}^1(\Omega)},$$

where C is a constant depending only on the shape-regularity of the mesh \mathcal{T}_h .

Combining the above estimates, we obtain the following error estimate for the piecewise linear approximation of \mathbf{u} on the mesh \mathcal{T}_h .

Lemma 2.2. *Let $\mathbf{u} \in \mathcal{H}^1(\Omega)$ and let $\mathbf{u}_h \in \mathcal{H}^1(\Omega)$ be the piecewise linear approximation of \mathbf{u} on the mesh \mathcal{T}_h . Then, for any $h \in \mathcal{H}$, it holds that*

$$\|\mathbf{u} - \mathbf{u}_h\|_{\mathcal{H}^1(\Omega)} \leq C h |\mathbf{u}|_{\mathcal{H}^1(\Omega)},$$

where C is a constant depending only on the shape-regularity of the mesh \mathcal{T}_h .

For the L^2 -norm, we use the following lemma, which is a consequence of the Bramble-Hilbert lemma (see, e.g., [10, 11]).

Lemma 2.3. *Let $\mathbf{u} \in \mathcal{H}^1(\Omega)$ and let $\mathbf{u}_h \in \mathcal{H}^1(\Omega)$ be the piecewise linear approximation of \mathbf{u} on the mesh \mathcal{T}_h . Then, for any $h \in \mathcal{H}$, it holds that*

$$\|\mathbf{u} - \mathbf{u}_h\|_{L^2(\Omega)} \leq C h |\mathbf{u}|_{\mathcal{H}^1(\Omega)},$$

where C is a constant depending only on the shape-regularity of the mesh \mathcal{T}_h .

Combining the above estimates, we obtain the following error estimate for the piecewise linear approximation of \mathbf{u} on the mesh \mathcal{T}_h .

Lemma 2.4. *Let $\mathbf{u} \in \mathcal{H}^1(\Omega)$ and let $\mathbf{u}_h \in \mathcal{H}^1(\Omega)$ be the piecewise linear approximation of \mathbf{u} on the mesh \mathcal{T}_h . Then, for any $h \in \mathcal{H}$, it holds that*

$$\|\mathbf{u} - \mathbf{u}_h\|_{\mathcal{H}^1(\Omega)} \leq C h |\mathbf{u}|_{\mathcal{H}^1(\Omega)},$$

where C is a constant depending only on the shape-regularity of the mesh \mathcal{T}_h .

For the L^2 -norm, we use the following lemma, which is a consequence of the Bramble-Hilbert lemma (see, e.g., [10, 11]).

Lemma 2.5. *Let $\mathbf{u} \in \mathcal{H}^1(\Omega)$ and let $\mathbf{u}_h \in \mathcal{H}^1(\Omega)$ be the piecewise linear approximation of \mathbf{u} on the mesh \mathcal{T}_h . Then, for any $h \in \mathcal{H}$, it holds that*

$$\|\mathbf{u} - \mathbf{u}_h\|_{L^2(\Omega)} \leq C h |\mathbf{u}|_{\mathcal{H}^1(\Omega)},$$

modus. As soon as it appears practicable, notice will be given and the requirement will be extended to comprise "Ancient History with special reference to Greek and Roman history, and including also a short introductory study of the more ancient nations and the chief events of the Middle Ages down to the death of Charles the Great (814)." It is recommended that instruction in the schools should be extended to comprise Ancient History in the sense above defined, and be conducted according to the methods recommended in the Report to the American Historical Association on the Study of History in Schools (Macmillan, 1899).

LATIN

3. *Latin Grammar.* The inflections; the simpler rules for composition and derivation of words; syntax of cases and verbs; structure of the sentence in general, with particular regard to relative and conditional sentences, indirect discourse and the subjunctive; so much prosody as relates to accent, versification in general, and dactylic hexameter.

4. *Latin Composition A.* Translation into Latin of detached sentences and very easy continuous prose, based upon Cæsar and Cicero.

5. *Cæsar.* Any four books of the Gallic War, preferably the first four.

6. *Cicero A.* Any six orations from the following list, but preferably the first six mentioned.

The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philippic.

7. *Vergil A.* The first six books of the *Æneid*.

8. *Sallust.* The *Catiline*.

Papers will be regularly set in Latin 9, which is an approved substitute for 8. Candidates desiring to offer 10, 11, 12, or any other substitute for any part of the specified

subjects 5, 6, 7 or 8, must notify the Registrar of the University on or before May 1st, preceding the examinations.

9. *Ovid*. Twenty-five hundred lines from the *Metamorphoses*.

10. *Vergil B*. The last six books of the *Æneid*.

11. *Vergil C*. The *Eclogues* and *Georgics*.

12. *Cicero B*. *De Amicitia* and *De Senectute*.

Papers will be regularly set in Latin 13 and 14. These subjects are not required nor may they be substituted for any of the specified subjects, but excellence in them will be taken into account in the general estimate of the candidate's Latin papers.

13. *Latin Composition B*. Consisting of continuous prose of moderate difficulty, based on Cicero.

14. *Sight Translation*. Based exclusively on prose of no greater difficulty than the easier portions of Cicero's orations.

GREEK

15. *Greek Grammar*. The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.

16. *Greek Composition A*. Consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions.

The examination in grammar and prose composition will be based on the first two books of Xenophon's *Anabasis*.

17. *Xenophon*. The first four books of the *Anabasis*.

18. *Homer A*. The first three books of the *Iliad* (omitting II, 494-end).

Greek 19 and 20 are approved substitutes for 18. Candidates desiring papers in these subjects or desiring to offer any other substitute for 18, must notify the Registrar of the University on or before May 1st, preceding the examinations.

19. *Homer B.* The sixth, seventh, and eighth books of the Iliad.

20. *Herodotus.* Selections from the seventh book, sections 1-60 and 172-239.

Papers will be regularly set in Greek 21 and 22. These subjects are not required, nor may they be a substitute for any of the specified subjects, but excellence in them will be taken into account in the general estimate of the candidate's Greek papers.

21. *Greek Composition B.* Consisting of continuous prose, based on Xenophon, and other Attic prose of similar difficulty.

22. *Sight Translation.* Based on prose of no greater difficulty than Xenophon's Anabasis.

FRENCH

23. *French A.* Candidates should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar.

Satisfactory preparation for this examination is furnished in the two-year course in elementary French recommended by the Modern Language Association. The course comprises drill in pronunciation, the rudiments of grammar, memorizing easy sentences, with easy exercises illustrating grammatical forms and principles, translation into French, writing French from dictation, and the reading of 100 to 175 pages of graduated texts with abstracts of this reading, followed by 250 to 400 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches, such as: *About's* Le roi des montagnes, *Bruno's* Le tour de la France, *Daudet's* easier short tales, *La Bédollière's* La Mère

Michelet et son chat, *Erckmann-Chatrian's* stories, *Foa's* Contes biographiques and *Le petit Robinson de Paris*, *Foncin's* Le pays de France, *Labiche and Martin's* La poudre aux yeux and *Le voyage de M. Perrichon*, *Lagoué and Labiche's* La cigale chez les fourmis, *Malot's* Sans famille, *Mairet's* La tâche du petit Pierre, *Mérimée's* Colomba, extracts from *Michelet*, *Sarcey's* Le siège de Paris, *Verne's* stories.

24. *French B.* Candidates should be able to read at sight ordinary French prose or simple poetry, to translate into French a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course. Preparation for this examination should include, in addition to the elementary course, 400 to 600 pages of moderately difficult French, a portion of it to be in the dramatic form; exercise in giving French paraphrases, and continued practice in grammar and composition.

Suitable texts are: *About's* stories, *Augier and Sandeau's* Le gendre de M. Poirier, *Béranger's* poems, *Corneille's* Le Cid and Horace, *Copée's* poems, *Daudet's* La Belle-Nivernaise, *La Brète's* Mon oncle et mon curé, *Madame de Sévigné's* letters, *Hugo's* Hernani and La chute, *Labiche's* plays, *Loti's* Pêcheur d'Islande, *Mignet's* historical writings, *Molière's* L'avare and Le bourgeois gentilhomme, *Racine's* Athalie, Andromaque, and Esther, *George Sand's* plays and stories, *Sandeau's* Mademoiselle de la Seiglière, *Scribe's* plays, *Thierry's* Récits des temps Mérovingiens, *Thiers' L'expédition de Bonaparte en Égypte*, *Vigny's* La canne de jonc, *Voltaire's* historical writings.

GERMAN

25. *German A.* Candidates should be able to read at sight, and to translate a passage of very easy dialogue or narrative prose, help being given upon unusual words and constructions; to put into German short English sentences

taken from the language of everyday life or based upon the text given for translation; and to answer questions upon the rudiments of the grammar.

Satisfactory preparation for this examination is furnished in the two-year course in elementary German recommended by the Modern Language Association. The course comprises drill in pronunciation, memorizing easy sentences, the rudiments of grammar with easy exercises illustrating grammatical forms and principles, and the reading of 75 to 100 pages of graduated texts from a reader, followed by 150 to 200 pages of easy stories and plays.

Stories suitable for the elementary course may be selected from the following list: *Andersen's* Märchen and Bilderbuch ohne Bilder, *Arnold's* Fritz auf Ferien, *Baumbach's* Die Nonna and Der Schwiegersohn, *Gerstücker's* Germelshausen, *Heyse's* L'Arrabbiata, Das Mädchen von Treppi, and Anfang und Ende, *Hillern's* Höher als die Kirche, *Jensen's* Die braune Erica, *Leander's* Träumereien and Kleine Geschichten, *Seidel's* Märchen, *Stöckl's* Unter dem Christbaum, *Storm's* Immensee and Geschichten aus der Tonne, *Zschokke's* Der zerbrochene Krug.

Suitable plays are: *Benedix's* Der Prozess, Der Weiberfeind, and Günstige Vorzeichen, *Els's* Er ist nicht eifersüchtig, *Wichert's* An der Majorsecke, *Wilhelmi's* Einer muss heiraten. It is recommended, however, that not more than one of these plays be read.

26. *German B.* Candidates should be able to read at sight German prose of ordinary difficulty, whether recent or classical; to put into German a connected passage of simple English, paraphrased from a given text in German; to answer any grammatical questions relating to usual forms and essential principles of the language, including syntax and word-formation, and to translate and explain a passage of classical literature taken from some text previously studied.

Preparation for this examination should include, in addition to the elementary course, about 400 pages of moderately difficult prose and poetry, with continued practice in grammar and composition. Suitable reading matter can be selected from such books as: *Ebner-Eschenbach's* Die Freiherren von Gemperlein, *Freytag's* Die Journalisten and Bilder aus der deutschen Vergangenheit—for example, Karl der Grosse, Aus den Kreuzzügen, Doktor Luther, Aus dem Staat Friedrichs des Grossen, *Fouqué's* Undine, *Gerstäcker's* Irrfahrten, *Goethe's* Hermann und Dorothea and Iphigenie, *Heine's* poems and Reisebilder, *Hoffmann's* Historische Erzählungen, *Lessing's* Minna von Barnhelm, *Meyer's* Gustav Adolf's Page, *Moser's* Der Bibliothekar, *Riehl's* Novellen—for example, Burg Neideck, Der Fluch der Schönheit, Der Stumme Ratsherr, Das Spielmannkind, *Rosegger's* Waldheimat, *Schiller's* Der Neffe als Onkel, Der Geisterseher, Wilhelm Tell, Die Jungfrau von Orleans, Das Lied von der Glocke, Balladen, *Scheffel's* Der Trompeter von Säckingen, *Uhland's* poems, *Wildenbruch's* Das edle Blut.

MATHEMATICS

In all numerical work special emphasis is laid upon accuracy and facility in reckoning.

In each of the following subjects simple original exercises will be set.

Problems having to do with lengths, areas or volumes, will be stated, usually, in terms of the metric system of weights and measures.

27. Algebra to Quadratics. A I. The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

28. *Elementary Algebra, Quadratics and beyond. A II.* Quadratic equations, equations in one or more unknown quantities, that can be solved by the methods of quadratic equations, ratio and proportion, the progressions, the elementary treatment of permutations and combinations, the binomial theorem for positive integral exponents, and the use of four, five, and six place logarithms.

29. *Plane Geometry.* Demonstrations of theorems and constructions and demonstrations of problems; the solution of simple numerical exercises, including lengths of lines and areas of the triangle, parallelogram, trapezoid, regular polygons, and circle; simple original exercises in construction and demonstration.

EXAMINATION CERTIFICATES ISSUED BY THE COLLEGE
ENTRANCE EXAMINATION BOARD

will be accepted in place of the regular entrance examinations, in so far as the certificates presented correspond to the requirements of this University. Candidates offering such certificates are required to submit therewith the testimonials as to character and general fitness prescribed above for other candidates. The latter testimonial shall state definitely the amount of work done in each subject offered for examination.

ADMISSION TO SPECIAL COURSES

In exceptional cases students, not members of any one of the four regular classes or candidates for a degree, are admitted to the privileges of the University and allowed to take special undergraduate courses, selected under the direction of the Faculty, in such a manner as to secure full and profitable employment of their time. Such special students undergo an entrance examination sufficient to ascertain their preparation for the courses proposed, and are subject to the same regulations and discipline and to the same examinations in the studies pursued as other undergraduates. Those desiring to enter as Special Students are expected to

take the regular entrance examinations upon such subjects as they offer, and in case the applicant passes in two of the three cardinal requirements (to wit, Latin, Greek, and Mathematics) for entrance to the Freshman class, Academic, he will ordinarily be accorded a special course of study. These special courses, however, are not offered to those who have failed in the regular course.

When special students are finally leaving the University, professors may authenticate for them such studies as they have pursued in their respective departments, and certificates of proficiency, signed by the President and Registrar, may be granted them on report by the Committee on Special Students that they have completed the courses on their schedule.

SOPHOMORE, JUNIOR AND SENIOR ENTRANCE REQUIREMENTS

Candidates for admission to the Sophomore class, who have not completed the studies of the Freshman class at another approved institution, must first pass an examination on the studies required for admission to the Freshman class.

Candidates for admission to the Sophomore, Junior or Senior class, when coming from another institution, are examined only in the studies of the year preceding that which they wish to enter, provided they present evidence that they have passed satisfactory examinations on the previous studies of the curriculum and entrance requirements, or their equivalents.

A candidate coming from an undergraduate class in an approved institution may be allowed, at the discretion of the Faculty, to enter the next lower class in this University without examination, provided he presents satisfactory certificates from his former institution.

The studies of the Freshman year are Latin, Greek, Mathematics, English, French or German. For admission

to the Sophomore class, candidates will be examined on the following minimum amounts or equivalents.

In Greek: Xenophon's Hellenica, books I-II; Herodotus, 60 pages, exclusive of any part offered for entrance to the Freshman class; Thucydides, book II, or an equal amount.

In Latin: Terence, one play; Livy, books I and XXI or XXII; Cicero, *De Senectute*; Roman History; Prose Composition based on Livy, book I.

In Mathematics: On courses 1, 2, 3, and 4 described under the heading Academic Mathematics on a later page.

In English: Hunt's Discourse, pp. 19-150, or equivalent.

In French or German: The elements of one of these languages.

The studies of Sophomore year include the following required subjects: Latin, Greek, Mathematics, Mechanics, English, History, Chemistry, Logic; and the following elective studies, of which two must be taken: Latin, Greek, Mathematics, French, German.

The required studies of Junior year are Ethics, Psychology, Physics and Political Economy. Five elective studies are to be chosen in each term from the departments of Philosophy, Language and Literature, Mathematics and Natural Science.

At the discretion of the Faculty the Bachelor of Arts diploma of an approved institution may be taken in place of the examination for entrance to the Senior year.

No person is admitted to the University as a candidate for the degree of Bachelor of Arts after the beginning of the first term of the Senior year.

REGULATION CONCERNING SECRET SOCIETIES

Immediately after the beginning of the Academic year the students entering the Undergraduate Department meet according to announcement for matriculation and subscrip-

tion to the following pledge required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without any mental reservation, that we will have no connection whatever with any secret society, nor be present at the meetings of any secret society in this or any other institution so long as we are members of Princeton University; it being understood that this promise has no reference to the American Whig and Clsosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

EXAMINATIONS, STANDING AND GRADUATION

EXAMINATIONS

Regular Examinations.—At the end of each term each class is ordinarily examined in the studies of that term. At the close of the second term the examination in certain subjects may embrace not only the work of that term, but the course of the entire year.

Partial Examinations and Written Recitations.—In addition to the regular examinations, partial examinations or written recitations are held from time to time during the term.

Divisional Examinations.—In the Freshman class special examinations are held early in the first term, the results of which determine the distribution of the class into graded divisions. These are reorganized at the beginning of the second term according to the results of the last preceding regular examinations.

General Regulations. Examinations are for the most part conducted in writing, but in certain subjects are oral in whole or in part. Private examinations are not allowed except in extreme cases and by special permission of the

Faculty. Absence from an examination, except for reasons of absolute necessity, will be regarded as a serious delinquency.

REGULATIONS RESPECTING CONDITIONS AND ABSENCE
FROM EXAMINATIONS

1. *Absence* from any examination, regular or special, counts as a failure.

Excuses for such absences are to be rendered to the Committee on Examinations and Standing.

2. *Conditions* are incurred by failure to satisfy the requirements of any course,—including term work, examinations, and any extra work imposed by the instructor for irregularity of attendance; also by exclusion from examination.

Exclusion Rule. A student who is absent from more than one-sixth of the exercises of any course may be excluded by the instructor from the examination in that course.

3. *Dropping Rule.* A student who is conditioned in *half or more of his work for a term* is dropped from his class without the privilege of re-examination,—and he must either withdraw from the University, or with permission of the Faculty enter the next lower class.

Previous conditions unremoved will be added to the total constituting failure under this rule, as provided in Rule 6, likewise *entrance conditions*, as provided in Rule 9.

4. *Re-examination.* A student who has conditions amounting to *less than half the work of a term* is given one opportunity to remove them, without penalty,—first term conditions or deficiencies due to absence in the fifth week of the second term; second term conditions in the first week of the Academic year in September.

5. *Second Opportunity.* A student who fails to remove his conditions or deficiencies at the first opportunity is granted a second opportunity,—on first term subjects in the

first week of the Academic year in September, on second term subjects in the sixth week of the Academic year. In case of Seniors the second opportunity on first term conditions will be given in June. For these examinations the student must pay the fee of Section 7, and he may be required by the instructor to employ a tutor and present a certificate of preparation.

6. *Senior Finals.* A Senior who fails to pass in not more than two subjects of the second term examination is allowed *one* re-examination, and, if successful may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next Academic year.

7. *Fee.* For each examination upon a deficiency after the first opportunity and not at a regular term examination, the student is required to pay a fee of \$5 into the University treasury, to be applied to the Library Fund.

8. *Entrance Conditions.* Opportunity for the removal of entrance conditions will be given in January in the first week after the holiday recess, and in the week following the Spring recess,—as well as at the regular entrance examinations in June and September.

Freshman entrance conditions remaining after the beginning of Sophomore year will be counted each as one hour toward dropping under Rule 3; and will also entail payment of the fee of Section 7.

9. *Schedules* of examination will be posted on the bulletin board in the University Offices, usually a week in advance. Examinations on deficiency are held only at the periods specified above, and no deferred or special examination is allowed. When a student has two subjects scheduled for the same time, the earlier subject takes precedence; for examination in the other subject the student must arrange in advance through the Committee on Examinations and Standing.

10. *Special Cases.* In the application of these regulations, special cases, arising from illness or other causes, will be duly considered by the Faculty. Requests to be relieved from the operation of any of these regulations must be made in writing.

STANDING

The results of the term examinations are combined with those of the recitations to decide the relative standing or rank of the student. The maximum mark in each study is one hundred; the minimum or passing mark is fifty.

The rank in each course is determined by the instructor; who computes from the recitations and examinations the marks of the class and divides the class into five groups in the order of merit.

The first group indicates very high standing and contains not more than ten per cent. of the entire class.

The second group indicates high standing and contains not more than twenty per cent. of the entire class.

The third group indicates medium standing and contains not more than thirty-five per cent. of the entire class.

The fourth group indicates low standing and contains not more than twenty-five per cent. of the entire class.

The fifth group indicates very low standing and contains not more than twenty-five per cent. of the entire class.

The general rank of a student is determined by combining his group numbers in the several courses in proportion to the allotted schedule time of each. The student whose averages are highest, and above an established limit, are assigned to the first general group; those next highest to the second general group, and so on through the general groups.

In determining a student's standing, essays count as one hour per week throughout each of the four years. Account

is taken of attendance and conduct as well as scholarship, according to the published rules of the Faculty.

A report of the standing of each student is made to his parent or guardian by the Registrar at the close of the first term and at the close of the year. The latter report gives also the standing for the whole year.

GRADUATION

BACHELOR'S DEGREE

Students who pass their final examinations are ordinarily recommended by the Faculty for the degree of Bachelor of Arts, and if the recommendation is approved by the Trustees, the degree is conferred at Commencement, and the diploma of the University is given.

No student will be recommended to the Trustees for a degree who fails to pass the examinations at the close of the last term of the Senior year.

Any member of the Senior class who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination, and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next Academic year.

FINAL RANK AND GRADUATION HONORS

The final rank of members of the graduating class is computed by combining the averages for the several years of the course, except that the average for the Freshman year is omitted in those cases in which it would lower the standing of the student. The Faculty then determines what portion of the class shall be printed as the Honor List—the names of the members of each group being printed in alphabetical order. Special Honors in particular departments are also awarded.

The first and second general groups thus determined are the Honor Groups of the graduating class, and are designated *magna cum laude* and *cum laude*, respectively.

The higher distinction of *insigni cum laude* and the highest of *summa cum laude*, are reserved for very unusual excellence.

COMMENCEMENT SPEAKERS

The student whose individual rank is highest is ordinarily awarded the Latin Salutatory by vote of the Faculty. The Valedictory is awarded with special regard to the qualifications of the student as a valedictorian as well as on the ground of scholarship. Five others out of sixteen recommended by the Baird Prize Committee deliver English orations, usually in the order of their scholarship.

In the award of all degrees and honors, regard is had to the conduct of the student during his course, and any student who has incurred serious discipline may be debarred from the rank to which otherwise his scholarship would have entitled him.

REGULATIONS FOR GENERAL AND SPECIAL HONORS

Honors are of two kinds, General and Special, and in each kind there are two degrees of distinction, High Honors and Honors. In very exceptional cases the Faculty may also bestow the further distinction of Highest Honors, either General or Special.

I. General Honors are awarded for general excellence in studies at the close of each Academic year, according to the following provisions:—At the close of the Freshman, Sophomore, and Junior years, High General Honors are given to those whose average rank for the year is within the first general group, and General Honors to those whose average rank for the year is within the second general group. At graduation High General Honors are given to those whose final average rank for the whole Academic course is within the first general group, and similarly General Honors to those within the second general group.

II. Special Honors are awarded for excellence in single leading departments of study at the close of the Sophomore year, and at graduation, according to the following provisions: The second-year Special Honors at the close of the Sophomore year, are given in the following departments: Latin, Greek, Mathematics. Only those whose average rank for the year in all their Sophomore courses is not below the third general group are eligible for second-year Special Honors. Such of these as maintain a first

group rank in the Freshman and Sophomore courses belonging to the department in which Special Honors are sought, receive High Honors, and similarly those who maintain a second group rank receive Honors.

The final Special Honors are awarded at graduation in the following departments: 1. Philosophy; 2. History, Jurisprudence and Politics; 3. Archæology and Art; 4. Classics; 5. Modern Languages; 6. English; 7. Mathematics; 8. Physical Science; 9. Natural Science. Only those whose final average rank for the whole academic course is not below the Third General Group are eligible for final Special Honors. Such of these as maintain a first group standing in at least nine of any ten courses in one of the above departments, pursuing four of these courses in Junior year and six in Senior year, receive High Honors, and the others who maintain an average first group rank in their ten courses receive Honors.

In departments where less than ten Junior and Senior courses are available for Special Honors, the necessary number of additional courses must be taken from a cognate department.

Students who intend to study for Special Honors shall give written notice of their intention to the Registrar when they hand in their list of electives at the beginning of Sophomore or Senior year.

UNDERGRADUATE COURSES OF INSTRUCTION

The course for the degree of Bachelor of Arts extends through four academic years and embraces instruction in the three departments of Philosophy, Language and Literature, Mathematics and Natural Science.

It includes two classes of studies, the required and the elective. The required studies are regarded as fundamental and essential in a liberal education and therefore are not left to the student's option. The elective studies, though important, are not all indispensable and accordingly are left, within definite limits, to the student's choice. Attendance upon all elective courses when once chosen, as well as upon all required courses, is obligatory. In connection with some departments there are also optional courses with voluntary attendance.

Most of the studies of the Freshman year are required and include Latin, Greek, Mathematics, and English. The student elects between French and German. If he has fulfilled only the minimum requirement for entrance (20 or 21), he must continue the study of the language in which he was examined; if he has fulfilled the advanced requirement (22 or 23), he may either continue the study of that language, or begin the study of the other.

In the Sophomore year the studies are substantially all required. They include Latin, Greek, Mathematics, and English, continued from the Freshman year, and in addition General History, Logic, Mechanics, and Chemistry. Opportunity is also given in elective courses in Latin, Greek,

Mathematics, French and German, for the student to extend his required work in any two of these directions.

In the Junior year the elective system more properly begins. About one-third of the student's time is occupied with required studies, which are Psychology, Ethics, Political Economy, Physics. In addition to these the student chooses five elective courses in each term, some of them open only to Juniors, and others to Juniors and Seniors.

In the Senior year the range of electives is wider. The student selects seven elective courses of study.

The various elective courses for Sophomores, Juniors, and Seniors are detailed on the following pages.

To prevent confusion and secure intelligence of choice on the part of students the electives are arranged systematically. As a rule no elective course is introduced until the student has passed through a required course in the same general department of study. The Sophomore electives are extensions of subjects already familiar to the student in the required courses and the Junior and Senior electives, though largely new studies, are preceded by suitable required courses.

A further inducement to coherency in choice is found in the provision for Honors. Apart from the General Honors awarded for general excellence there are Special Honors in the leading departments, in both required and elective studies. The effect of this is to concentrate choice upon cognate studies. The General and Special Honors are described on preceding pages.

In the two lower years the instruction is conducted mainly by recitations. The Freshmen and Sophomores recite in four, five, six, seven, or eight divisions, constituted according to rank and according to their degree of proficiency in the leading studies. They are divided separately for the Classics, Mathematics, and Modern Languages. As the work is thus proportioned to individual ability, rapid

progress can be made by those who have special aptitude for certain studies.

Optional courses, so ordered as not to conflict with the time allotted to the regular instruction of the course, are offered in connection with several departments under such restrictions as may be prescribed by the Faculty. These courses are designed to benefit those who wish to extend their reading or study in certain branches; they amplify the subjects taken up in the regular course, and in some cases conclude with a special examination upon which is based a certificate of proficiency. A student may not take more than two optional courses at one time, and only one course, if that course occupies more than two hours weekly.

In awarding the Bachelor's degree and assigning the final rank, the student's work for the whole four years is taken into account.

REGULATIONS REGARDING THE CHOOSING OF ELECTIVES

Students are required to choose their elective studies for the first term at the beginning of that term, and no changes will be allowed after the close of the third week, and none before that time, except for special reasons approved by the Faculty.

Students are required to hand in writing to the Registrar, on or before the third Monday in January, their choice of electives for the second term, and no changes will be allowed after that date, except for special reasons approved by the Faculty.

If a student be in the lower group in any department, he shall have liberty to choose his elective studies only in departments in which his previous standing has been above that group. If he desire any other elective studies, he shall send in his proposed list of such studies to the Faculty for approval, and if his choice be not approved the Faculty shall assign him his electives.

STATEMENTS OF COURSES

In the following statements of courses the numbers in brackets indicate the number of exercises a week.

DEPARTMENT OF PHILOSOPHY

I. MORAL PHILOSOPHY

EX-PRESIDENT PATTON AND PROFESSOR G. S. PATTON

2. Ethics. Theoretical and practical ethics, the foundation of moral obligation, the will, conscience, the nature of virtue, and the moral law. Lectures. Junior Required; second term [2]. Ex-President Patton. *Seth*: Ethical Principles; *Mackenzie*: Manual of Ethics.
- 3, 4. (Latin 13, 14.) Lucretius, *De Rerum Natura*, and Cicero, *De Natura Deorum*. Senior Elective; both terms [2]. Professor Packard.
5. Theism. Senior Elective; first term [2]. Ex-President Patton.
7. History of English Ethics from Hobbes to Mill. Senior Elective; first term [2]. (Not given 1903-1904.) Ex-President Patton and Professor G. S. Patton. Lectures, critical reading of selected works, and a thesis.
9. Contemporary English Ethics. Senior Elective; first term [2]. Professor G. S. Patton (Ex-President Patton co-operating). Critical reading and discussion of the works of Spencer, Sidgwick, Martineau, and Green.

II. MENTAL PHILOSOPHY

PROFESSORS ORMOND, BALDWIN, HIBBEN, AND WARREN

2. Elements of Logic. Sophomore Required; second term [2]. Professor Hibben. Lectures. *McCosh*: Deductive Logic; *Hibben*: Inductive Logic.
3. Psychology. Elementary course. Junior Required; first term [2]. Professor Baldwin. Lectures and conferences. *Baldwin*: Elements of Psychology. References: *James*: Briefer Course.
4. Experimental Psychology. Introductory course. Methods, scope, and general results of the experimental investigation of the mind, considered especially with reference to general psychology, education, and medicine. Analysis of sensation, including the common senses, with demonstrations; examination of contrast, fatigue, habit, etc.; practice in the use of apparatus. Junior Elective; second term [2]. Professor Warren. Lectures, demonstrations, and experimental work in the laboratory. *Sanford*: Course in Experimental Psychology.
- 5 1. History of Ancient Philosophy. Greek and Roman period to the close of pagan schools. (Given 1903-1904, alternating with 5 II.) Junior and Senior Elective; first term [2]. Professor Ormond. Lectures, reading and written recitations. *Zeller's*, *Windelband's*, and *Weber's* Histories of Philosophy.
- 6 1. History of Mediæval Philosophy, embracing the patristic and scholastic periods and ending with Francis Bacon. (Given 1903-1904, alternating with 6 II.) Junior and Senior Elective; second term [2]. Professor Ormond. Lectures and written recitations, with references to *Ueberweg's*, *Erdmann's*, and *Windelband's* Histories of Philosophy.

- 5 II. History of Modern Philosophy. Philosophy from Descartes to Kant. (Given 1904-1905, alternating with 5 I.) Junior and Senior Elective; first term [2]. Professor Ormond. Lectures, with references to *Falkenberg*.
- 6 II. History of Modern Philosophy. Philosophy since Kant. (Given 1904-1905, alternating with 6 I.) Junior and Senior Elective; second term [2]. Professor Ormond. Lectures, with references to *Falkenberg*.

The courses 5 I, 6 I, 5 II, 6 II, furnish a continuous course of lectures on historical philosophy running through two years.

9. The Theory of Logic, and Applied Logic, with special reference to the principles of argumentation. Junior Elective; first term [2]. Professor Hibben. Lectures.
10. Symbolic Logic, and Theory of Probability. Junior Elective; second term [2]. Professor Hibben. Lectures.
13. Theory of Knowledge. Lectures and reading. Senior Elective; first term [2]. Professor Ormond. *McCosh*: First and Fundamental Truths; *Ormond*: Foundations of Knowledge.
14. Metaphysics. Lectures and reading. Senior Elective; second term [2]. Professor Ormond.

Courses 13 and 14, taken together, are intended to supplement the work in the History of Philosophy, with a course of constructive work running through the year; 13 dealing mainly with the problems of knowledge, while 14 treats more directly of the problems of reality.

15. Physiological Psychology. Lectures and demonstrations in the laboratory. Treatment of mental defect and disease. Senior Elective; second term [2]. Professor Baldwin. (Not given 1903-1904.) It is recommended that those electing this course take Neurology in the first term.

16. The Psychology of Logic. Lectures on the psychological basis and postulates of logic; theories of leading psychologists and logicians. Senior Elective; second term [2]. Professor Warren.
- 17, 18. Experimental Psychology. Advanced course. (Continuation of course 4.) The psychology of the special senses, experimentally treated: qualitative and quantitative analysis (psychophysics). Examination of the higher cognitive processes: perception and illusion, memory, association, thought. The active processes; reaction times, psychological conditions, movements, practice. Senior Elective; both terms [2]. Professor Warren. Lectures, demonstrations, and experimental work in the laboratory. References: *Sanford, Titchener, Wundt, Külpe, Jastrow*.
19. General Psychology. Advanced course. Senses and intellect, with abnormal conditions. Senior Elective; first term [2]. Professor Baldwin. Lectures. References: *James, Wundt, Ladd, Baldwin*.
20. General Psychology. Advanced course. Feeling and will, with abnormal conditions. Senior Elective; second term [2]. Professor Baldwin. Lectures. References: *James, Wundt, Ladd, Baldwin*.
22. Theories of Heredity and Descent. (Also Biology 22.) General treatment by lectures of the important questions in evolution. Senior Elective; second term [2]. Professor Baldwin. *Baldwin*: Development and Evolution; *Conn*: The Method of Evolution.
- 23 I. Negative Theories of Knowledge. Graduate course; first term [3]. (Given 1904-1905.) Lectures and readings. Professor Ormond.
- 24 I. Kant, Lotze, and Contemporaneous Philosophy. Graduate course; first term [3]. Lectures, reading, and conferences. Professor Ormond.

- 24 II. Encyclopedia of Philosophy. Graduate course. Second term [3]. (Given 1903-1904.) Lectures and readings. Professor Ormond.

It is Professor Ormond's intention to offer one additional graduate course to alternate with 23 I, and with 23 II, 24 I, and 24 II, to constitute a two years' course of graduate study.

- 27, 28. Experimental Psychology. Laboratory course, consisting largely in research work, with weekly conference for original reports ; open to all qualified graduate students. Graduate course ; both terms [3]. Professor Warren, Professor Baldwin co-operating.

PHILOSOPHICAL SEMINARY

DIRECTOR, 1903-1904, PROFESSOR HIBBEN

- 29, 30. SEMINARY IN GENERAL PHILOSOPHY. Topic for the year: The Philosophy of Hermann Lotze. Conducted by reading, theses, and discussions. Both terms. Professor Ormond.
- 31, 32. Psychological Seminary. Topic to be determined in consultation with class ; open to graduate students who satisfy the professor of their competence ; limited to twelve men studying for advanced degrees. Both terms. Not given for less than five men. Professor Baldwin.
33. Theory of Mental Measurements. Graduate course ; first term [3]. Professor Warren.
34. Reading in German Philosophy. Graduate course ; both terms [3]. *Hegel's Logik*. Professor Hibben.
- 35, 36. Ethical Seminary. Fundamental Ethical concepts. Graduate course ; both terms [3]. Ex-President Patton, Professor G. S. Patton assisting.

III. HISTORY

PROFESSORS PAUL VAN DYKE, FROTHINGHAM, CONEY
AND McELROY

1. (A portion of Greek 3.) Greek History. Freshman Required ; first term [2]. Professor Prentice and Mr. Hutson.
2. (Latin 2.) Roman History. Freshman Required; second term [1]. Professor Carter.
3. General History. Sophomore Required ; first term [2]. Professor Paul van Dyke or Professor Coney.
5. Greek History. From the earliest times to the Ionian Revolt. Junior and Senior Elective ; first term [2]. (Given 1904-1905.) Professor Frothingham.
6. Greek History. From the Ionian Revolt to the Peloponnesian War. Junior and Senior Elective ; second term [2]. (Given 1904-1905.) Professor Frothingham.
- 5 I. Roman History. From the founding of Rome to the close of the Punic Wars. Junior and Senior Elective; first term [2]. (Given 1904-1905.) Professor Frothingham. *How and Leigh: A History of Rome; Mommsen.*
- 6 I. Roman History. From the fall of Carthage to the fall of the Republic. Junior and Senior Elective ; second term [2]. (Given 1904-1905.) Professor Frothingham. *How and Leigh, Mommsen.*
- 5, II. Roman History. From Augustus to the last of the good Emperors. Junior and Senior Elective ; first term [2]. (Given 1903-1904.) Professor Frothingham. *Bury: Roman Empire; Merivale, Duruy, Capes.*
- 6 II. Roman History. Decline and Fall of the Empire, from Commodus to Justinian. Junior and Senior Elective; second term [2]. (Given 1903-1904.) Professor Frothingham. *Duruy, Gibbon, Hodgkin, Curteis.*

7. Mediæval History to the Thirteenth Century. Lectures and collateral reading. Junior Elective; first term [2]. Professor Coney.
8. Mediæval History. From the Thirteenth to the Sixteenth Century. Lectures and collateral reading. Junior Elective; second term [2]. Professor Coney.
- 9 I. The Age of the Renascence. Junior and Senior Elective; first term [2], alternating with 9 II and 9 III. Professor Paul van Dyke. Lectures.
- 10 I. The Fall of the House of Valois. Junior and Senior Elective; second term [2], alternating with 10 II and 10 III. Professor Paul van Dyke. Lectures and reading.
- 9 II. The Age of the Reformation in Germany: 1493-1554. Junior and Senior Elective; first term [2], alternating with 9 I and 9 III. (Given 1903-1904.) Professor Paul van Dyke. Lectures.
- 10 II. England under the Tudors. Junior and Senior Elective; second term [2], alternating with 10 I and 10 III. (Given 1903-1904.) Professor Paul van Dyke. Lectures and reading.
- 9 III, 10 III. The Three English Revolutions (the Commonwealth, the Revolution of 1689, the Revolt of the American Colonies), their resemblances, contrasts, and connections. Junior and Senior Elective; both terms [2], alternating with 9 I and 9 II, 10 I and 10 II. (Given 1904-1905.) Professor Paul van Dyke. Lectures and reading.
11. Thesis Course in English History. Open to a limited number of Juniors and Seniors who have ranked in the first or second groups in History during the previous year. A thesis and text-book. The thesis to serve instead of an examination. Restricted Junior and Senior Elective; first term [2]. In charge of Professor Paul van Dyke, assisted by Professor Coney and Professor McElroy. This class meets in 1903-1904 in two

sections. The Junior section studies English History to the age of the Tudors. The Senior section takes up the history from that time on.

No Junior may take more than two courses in History during the same term.

13. Modern European History, with special reference to the consolidation of the German States. Senior Elective; first term [2]. Professor Coney.
14. Constitutional and Political History of England since the Reformation. Lectures and collateral reading. Senior Elective; second term [2]. Professor Coney.
- 15, 16. American History. Lectures, text-book, and collateral reading. Senior Elective; both terms [2]. Professor McElroy.
18. Ancient Monarchies of the East, from the beginning of history in Babylonia through the later civilizations of Assyria and Persia to the time of Alexander. History, religion, and life, with special reference to recent discoveries. Lectures and recitations with collateral reading and thesis. Senior Elective; second term [2]. Professor Frothingham. References: *Rawlinson: Stories of the Nations Series*; *Scribner's Semitic Series*, especially *Sayce, Craig*, and *Hommel*; *Maspero*; *Rogers*; *Babylon*.

IV. JURISPRUDENCE AND POLITICS

THE PRESIDENT AND DR. ELLIOTT

- 1 1. Outlines of Jurisprudence. An exposition of Jurisprudence as an organic whole, exhibiting the nature of its subject-matter, its relationship to cognate branches of study, the inter-relationship of its several parts to each other, and their proper function and aim. Lectures and collateral reading. Junior and Senior Elective; first term [2], alternating with course 1 11. (Given

- 1903-1904.) The President. *Pollock*: A First Book of Jurisprudence.
- 2 1. The Elements of Politics. An analysis of modern political ideas, of the genesis and action of the body politic, and of the character and lodgment of political authority. Lectures and collateral reading. Junior and Senior Elective; second term [2], alternating with course 2 II. (Given 1903-1904.) The President. *J. R. Seeley*: Introduction to Political Science.
 - 1 II. Constitutional Government; its nature, genesis, and operation. Lectures and collateral reading. Junior and Senior Elective; first term [2], alternating with course 1 I. The President. *E. Boutmy*: Studies in Constitutional Law; *W. Wilson*: The State.
 - 2 II. American Constitutional Law. Lectures and collateral reading. Junior and Senior Elective; second term [2], alternating with course 2 I. The President. *Cooley*: American Constitutional Law; *A. V. Dicey*: The Law of the Constitution.
 3. International Law. Lectures and collateral reading. Senior Elective; first term [2]. Dr. Elliott. *Hall*: A Treatise on International Law.
 4. Some Unsettled and Current Problems of International Law. Senior Elective; second term [2]. Dr. Elliott. Open only to those Seniors who have taken course 3.
 5. The History of Modern Political Theories, with particular reference to American political theories and their sources. Senior Elective; first term [2]. Dr. Elliott.
 - 6, 7. (Latin 17, 18.) Roman Law. Readings, lectures, and recitations. Senior Elective; both terms [2]. Professor Westcott. *Justinian*: Institutes; *Sohm*: Institutes of Roman Law.
 - 8 1. The Private Law Orations of Cicero (Latin 26 1). Graduate course; second term [3], alternating with 8 II. Professor Westcott.

10. **Development of Industrialism.** This course will continue and supplement course 7, and will treat of the rise of a new industrial order as an outcome of the industrial revolution, of the factory system, its development in the growth of capitalism and in the organization of labor,—involving combinations, trusts, monopolies, and trades unions. This course is open to a limited number of qualified Seniors, both Academic and Scientific, and will be conducted on the same plan as course 9. Second term [2]. (Not given 1903-1904.) Professor Wyckoff.
11. **Sociological Criminology.** A study of the criminal class and of preventive, punitive, and reformatory methods. The general problem studied will be the relation of crime to social progress. The course will include lectures on criminal anthropology and penology, reports on topics assigned for investigation, and the discussion and criticism of the reports in the class. This course is open to approved Seniors, both Academic and Scientific; first term [2]. Dr. Hall. *Hall: Crime and Social Progress.*
12. **Advanced Economic Theory.** An exposition of economic theory, historical and dogmatic. Seminary course for competent graduates designed to continue and supplement course 9; hours to be arranged with the instructor. Second term [3]. Professor Daniels.

VI. ARCHÆOLOGY AND THE HISTORY OF ART

PROFESSORS MARQUAND, FROTHINGHAM, AND MR. BUTLER

1. **Ancient Art.** A general course on the art of ancient Egypt, Assyria, Phœnicia, Greece, and Rome. Junior and Senior Elective; first term [2]. Professor Marquand. Lectures and text-book. *Reber: History of Ancient Art.*

2. Mediæval Art. A general course on early Christian, Romanesque and Gothic Architecture. Junior and Senior Elective; second term [2]. Mr. Butler. Lectures and text-book. *Reber*: History of Mediæval Art.
3. Renaissance Painting. Senior Elective; first term [2]. Professor Marquand. Lectures.
4. Greek Sculpture. Senior Elective; second term [2]. Mr. Butler. Lectures and text-book. *Gardner*: Handbook of Greek Sculpture.
5. Renaissance Painting. Senior Elective; second term [2]. Professor Marquand. Lectures.
- 7, 8. Gothic Cathedrals. A study of the principal monuments of Gothic architecture in Europe, with an examination into the origin and history of the style. Senior Elective; both terms [2]. Professor Frothingham.
9. Greek Architecture. Graduate course; first term [3]. A reading knowledge of French or German will be required. Professor Marquand.
10. French Sculpture. Graduate course; second term [3]. A reading knowledge of French will be required. Professor Marquand. This course will be omitted in 1903-1904.
11. Early Christian Antiquities, from the beginning of Christianity to its triumph under Constantine, with especial study of the Roman Catacombs and their art, the first church buildings and the origin of liturgy. Graduate course; first term [3]. Professor Frothingham.
12. Christian Antiquities, from the fourth century to Charlemagne; the development of church buildings and liturgy, as well as of fresco and mosaic painting and other forms of art, especially with reference to art themes used for the instruction of the masses by the church. Graduate course; second term [3]. Professor Frothingham.

SCHOOL IN ROME

This University has been interested in the recent establishment of the American School of Classical Studies in Rome. This School affords facilities for archæological and classical advanced study and investigation in Italy for both the ancient and Christian periods. Approved graduates of this University are entitled to all its advantages free of tuition and may compete for its three Fellowships, two of \$600 and one of \$500. Further information may be obtained from Dean West, Chairman, or Professors Marquand and Frothingham, members of the managing committee of the School.

VII. ARCHITECTURE

MR. BUTLER

- 1, 2. Elements of Architecture. The Classic orders, studied in their historical development, from reproductions of the ancient monuments, from the text of Vitruvius, and from the works of Vignola; with drawing from restorations and photographs. Senior Elective; both terms [2]. Mr. Butler.
- 3, 4. Historical Drawing. The Classic orders, drawn to scale in pen and ink and in wash drawings, with shades and shadows, from reproductions of the ancient monuments and from the works of Vitruvius and Vignola; with exercises in historical design. Senior Elective (open only to those taking courses 1, 2.); both terms [2]. Mr. Butler.
- 5, 6. Christian Architecture. A practical study of Ecclesiastical Architecture from the fourth century to the twelfth, including the subjects of the construction, design, and details of the early Christian, Byzantine, and Romanesque periods. Requires elementary know-

ledge of the history of Christian art and of Mediæval history, and ability to read French. Graduate course; both terms [3]. Mr. Butler.

DEPARTMENT OF LANGUAGE AND LITERATURE

VIII. SEMITICS

DR. LITTMANN

For the year 1903-1904 the following courses are offered :

- 1, 2. Elementary Arabic. Grammar, exercises, reading of easy texts. Senior Elective; both terms [2]. *Socin*: Arabic Grammar; *Brünnow*: Chrestomathy of Arabic Prose-Pieces.
- 3, 4. Advanced Arabic. Interpretation of the more difficult texts; reading of manuscripts and inscriptions. Graduate course; both terms [2]. *Noeldeke-Müller*: *Delectus Veterum carminum Arabicorum*. *Imād ad-Dīn*: Conquest of Syria and Palestine by Saladin (Ed. *Landberg*).
- 5, 6. Ethiopic. Outline of the history of Ethiopic literature with interpretation of selections from different works, and reading of manuscripts. Graduate course; both terms [2].
7. Semitic Epigraphy. Interpretation of Phœnician, Palmyræan, Nabatæan or South Arabian inscriptions. Graduate course; first term [2]. *Lidsbarski*: *Handbuch der Nordsemitischen Epigraphik*; *Hommel*: *Süd-arabische Chrestomathie*.
8. Advanced Syriac. Interpretation of a text from *Land*: *Anecdota Syriaca*. Graduate course; second term [2]. Courses on other Semitic languages and their literature, and in addition on Coptic and Turkish, may be given if desired.

IX. INDO-IRANIAN

PROFESSORS WINANS AND ROBBINS

- 1, 2. Elementary Sanskrit. Grammar, exercises, and reading of easy texts; comparison of forms. Senior Elective; both terms [2]. Professor Robbins. *Perry*: Sanskrit Primer; *Geiger*: Elementarbuch der Sanskritsprache; *Whitney*: Sanskrit Grammar; *Uhlenbeck*: Manual of Sanskrit Phonetics; *Lanman*: Sanskrit Reader.
- 3, 4. Advanced Sanskrit. Reading of classical and Vedic Sanskrit in the first and second terms respectively. Graduate course; both terms [2]. Professor Winans or Professor Robbins. *Windisch*: Zwölf Hymen des Rig Veda; or *Peterson*: Handbook to the Study of the Rig Veda, part II.
- 5, 6. Avesta. Grammar and reading of selected texts. Graduate course; both terms [2]. Professor Robbins. *Jackson*: Avesta Grammar, Avesta Reader, first series; *Geldner*: Avesta; *Mills*: Gâthâs.

Of the above courses, ordinarily not more than two are given in any one year.

X. GREEK

PROFESSORS WINANS, ROBBINS, AND PRENTICE, MR. HUTSON
AND MR. HALL

1. Lysias: Orations. Study of Greek syntax and style, with practical exercises. Freshman Required; first term [2]. Mr. Hutson and Mr. Hall. *Morgan*: Lysias; *Allison*: Greek Prose Composition.
2. Xenophon: Memorabilia, or Xenophon: Symposium and Dion Chrysostom; Hunters of Euboea. Freshman Required; second term [2]. Mr. Hall. *Blake*: Hellenica; *Botsford*: History of Greece.

3. Xenophon: *Hellenica* 1-II. Greek History. Freshman Required; first term [2]. Professor Prentice and Mr. Hall. *Blake*: *Hellenica*; *Botsford*: *History of Greece*.
4. Herodotus: selections, sight reading. Freshman Required; second term [2]. Professor Robbins and Mr. Hutson. *Merry*: Herodotus, and *Teubner text*.
5. Aristophanes; *Clouds* and *Plutus*. Sophomore Required; first term [2]. Professors Winans and Robbins. *Merry* or *Graves*: *Clouds*; *Green*: *Plutus*.
6. Euripides: two plays. In 1903-1904, *Iphigenia in Tauris* and *Hippolytus*. Sophomore Required; second term [2]. Professor Prentice and Mr. Hutson.
7. Homer: the *Odyssey*. In 1903-1904, books V-VIII and selections from books XIII-XXIV. Sophomore Elective; first term [2]. Professor Prentice and Mr. Hutson.
8. Lucian's Dialogues. Sophomore Elective; second term [2]. Professor Winans. *Williams*: Selections from Lucian.
- 9 I. Æschylus: selected plays. Lectures. (Given 1903-1904, alternating with 9 II.) Junior and Senior Elective; first term [2]. Professor Robbins.
- 9 II. Homer: selected books from the *Iliad*. Aristophanes: *Frogs* and *Acharnians*. Lectures on comedy and on Aristophanes and his works. (Given 1904-1905, alternating with 9 I.) Junior and Senior Elective; first term [2]. Professor Robbins. *Merry*: *Acharnians*; *Merry* or *Green*: *Frogs*.
10. Plato: selected dialogues. Lectures. (Given 1903-1904.) Junior and Senior Elective; second term [2] Professor Winans.
11. History of Greek Prose Literature, with special regard to the literary sources of Greek history. Lectures and readings from Greek historians. Junior and Senior Elective; first term [2]. Professor Prentice.

12. Sophocles: selected plays. Lectures on the Greek drama and Greek legends. Junior and Senior Elective; second term [2]. Professor Prentice.
- 13 I. Greek Historians: Thucydides. Lectures; critical study. Senior Elective; first term [2]. Professor Winans.
- 13 II. Euripides: selected plays. Lectures. Senior Elective; first term [2]. (Given 1904-1905.) Professor Winans.
14. Greek Lyric Poets. Survey of Greek poetry from Homer to Theocritus. Lectures and discussions; select readings; individual work, with theses. Senior Elective; second term [2]. Professor Winans.
- 15, 16. Greek Dialects. Inscriptions and Homer. Seminary course for approved Seniors; both terms [2]. Professor Robbins. *Cauer*: Delectus; *Hoffman, Meister, Smythe, Ahrens*.
18. Comparative Grammar of Greek and Latin. Lectures. Senior Elective; second term [2]. Professor Robbins.
19. Aristophanes: selected plays. Graduate course; first term [3]. Professor Robbins.
20. Historical Latin and Greek Grammar. Phonology and morphology. Lectures and Reading. Graduate course: second term [3]. Professor Robbins. *Brugman, Hirt, Meyer, Stolz, Lindsay*.
21. Greek Inscriptions. General introduction; the alphabet; historical inscriptions of the fifth century; inscriptions relating to economics and finance. Graduate course; first term [3]. Professor Prentice.

A special course in Greek epigraphy will be given, if desired, to approved students.
22. Symposiums of Xenophon and Plato, with studies in textual criticism. Graduate course; second term [3]. Professor Winans.

SCHOOL AT ATHENS

This University, in connection with others, assisted in establishing and contributes to the support of the American School of Classical Studies at Athens. This school affords facilities for archæological and classical investigation and study in Greece, and approved graduates of this University are entitled to all its advantages free of tuition. Two fellowships in Classical Archæology, each of the value of \$600, are awarded annually by competition. Further information may be obtained from Professors Winans or Prentice, who represent Princeton in the managing committee of the school.

XI. LATIN

DEAN WEST, PROFESSORS PACKARD, WESTCOTT, AND CARTER,
DR. RANKIN, MR. WHITE, MR. ANDERSON,
AND MR. RIKER

1. Livy: books I, XXI and XXII. Freshman Required; first term [3]. Professor Westcott, Mr. White, or Mr. Simpson. *Westcott*: Livy.
2. Cicero: De Senectute and De Amicitia. Tacitus: Agricola, and Germania. Roman History. Freshman Required; second term [4]. Professor Carter, Dr. Rankin, Mr. White, Mr. Anderson, or Mr. Riker.
3. Latin Prose Composition. Freshman Required; first term [1]. Dr. Rankin and Mr. White. Exercises based upon Livy.
5. Plautus and Terence. Reading of selected plays, with occasional lectures on the history of Latin comedy. Sophomore Required; first term [2]. Professor Carter or Dr. Rankin.
6. Horace: Odes. Catullus: selections. Sophomore Required; second term [2]. Dean West. *Bennett*: Horace; *Simpson*: Selections from Catullus.

- 7a. Cicero : Letters. Sophomore Elective ; first term [2]. Mr. White. *Abbott* : Letters of Cicero.
- 7b. The Period of the Civil Wars, 49 to 31 B. C., studied from original sources. Pro-Seminar, restricted (substitute for 7a). Sophomore Elective ; first term [2]. Professor Westcott.
- 8a. Tacitus : Histories. Sophomore Elective ; second term [2]. Professor Westcott or Instructor. *Godley* : Tacitus.
- 8b. The Reigns of Augustus and Tiberius, with special attention to the Divus Augustus of Suetonius and the Annals of Tacitus, and including an elementary course in epigraphy. Pro-Seminar, restricted (substitute for 8a). Sophomore Elective ; second term [2]. Professor Westcott.
9. Juvenal's Satires, and selected Letters of Pliny ; lectures upon the moral and religious aspect of the Earlier Empire. Junior Elective (Seniors admitted on application to the Professor) ; first term [2]. Professor Packard. Any accepted edition or text.
10. Seneca's Epistolæ ad Lucilium. Lectures, with added work and theses on selected portions of Seneca's other writings. Junior Elective (Seniors admitted on application) ; second term [2]. Professor Packard. *Teubner text*.
11. The Roman Elegy in the Augustan Age. Selected reading from Tibullus, Propertius, and Ovid. Lectures on the history of elegiac poetry. Junior Elective ; first term [2]. Professor Carter.
13. (Moral Phil. 3.) Lucretius : De Rerum Natura, lectures illustrative of the subject. Senior Elective ; first term [2]. Professor Packard. *Harper's texts*.
14. (Moral Phil. 4.) Cicero : De Natura Deorum, with selected readings from De Divinatione, and De Fato ; lectures. Senior Elective ; second term [2]. Professor Packard. *Harper's texts*.

17. (Jur. and Pol. 6.) Roman Law: lectures and recitations. Senior Elective; first term [2]. Professor Westcott. *Sohn*: Institutes of Roman Law.
18. (Jur. and Pol. 7.) Roman Law. Senior Elective; second term [2]. Professor Westcott. The Institutes of Justinian.
- 19 I. History of Roman Literature under the Republic. Reading of selected authors and lectures. Senior Elective; first term [2], alternating with 19 II. (Given 1903-1904.) Professor Carter.
- 19 II. History of Roman Poetry under the Empire. Reading of selected authors and lectures. (Given 1904-1905.) Senior Elective; first term [2], alternating with 19 I. Professor Carter.
20. Virgil. A critical study of his literary development as illustrated in the *Bucolics*, the *Georgics*, and the *Æneid*, together with an investigation of the *Pseudo-Virgiliana*. Senior Elective; second term [2]. Professor Carter.
- 21, 22. Mediæval Latin Literature. A course involving the extensive reading of representative writers and of the history of mediæval Latin literature. Graduate course; both terms [3]. Dean West.
- 26 I. (Jur. and Pol. 8 I.) Law Orations of Cicero, with a study of the legal institutions of his time. Graduate course; second term [3], alternating with 26 II. Professor Westcott.
- 26 II. (Jur. and Pol. 8 II.) Sources of Early Roman Law. Graduate course; second term [3], alternating with 26 I. Professor Westcott. *Bruns*: *Fontes Juris Romani Antiqui*; *Lindsay*: *Latin Inscriptions*.
28. Tacitus. Graduate course; second term [3]. Professor Westcott.
30. History of Prose Literature under the Empire. Senior Elective; second term [2]. Professor Westcott.

32. Introduction to the study of Mythology. Lectures and theses. Graduate course; second term [3]. Professor Carter.
34. Method of Palæography and Text-Criticism. Seminary: lectures and drill in text-making—search for MSS., collation, formation of genealogies and construction of text. Graduate course; second term [3]. Dr. Richardson.

CLASSICAL SEMINARY

DIRECTOR, 1903-1904, DEAN WEST

XII. ENGLISH

PROFESSORS HUNT, RAYMOND, HENRY VAN DYKE, HARPER, PARROTT, COVINGTON, AND AXSON, AND MR. TUCKERMAN, MR. HUTTON, AND DR. CRAIG

- 1, 2. Rhetoric; exercises in description and narration. Freshman Required; both terms [2]. Professor Axson and Dr. Craig. Oratory 1, 2 (see XIII below) may be substituted for this course, but one of the two courses must be taken.
3. Introduction to English Literature. Sophomore Required; first term [2]. Professor Axson. *Pancoast*: Introduction to English Literature. Collateral reading. Themes. Argumentative Composition (see Oratory 3 below) may be substituted for this course, but one of the two courses must be taken.
5. Elizabethan Drama. Predecessors of Shakespeare. Junior Elective; first term [2]. Professor Harper. Lectures.
6. Elizabethan Drama. Shakespeare. Junior Elective; second term [2]. Professor Harper. Lectures.

7. Pope to Wordsworth. Rise of the Romantic School. Junior Elective; first term [2]. Professor Axson. Lectures.
8. Spenser and Milton. Junior Elective; second term [2]. Professor Axson. Lectures.
9. Elementary Old English. Junior and Senior Elective; first term [2]. Professor Hunt. *Smith*: Old English Grammar; *Bright*: Anglo-Saxon Reader.
10. Middle and Modern English. English Language readings. Lectures on English Language. Junior and Senior Elective; second term [2]. Professor Hunt. *Champney*: History of English; *Morris and Skeat*: Specimens of Early English; *Corson*: Chaucer's Canterbury Tales; *Skeat*: Piers Plowman.
11. American Literature. Discussion of leading types and authors. Senior Elective; first term [2]. Professor Hunt. *Richardson*: American Literature; *Stedman*: Poets of America.
12. The Interpretation of Literature—English Literature. Senior Elective; second term [2]. Professor Hunt. *Hunt*: Studies in Literature and Style.
- 13 I. British Prose Writers of the Nineteenth Century; Scott, Coleridge, Lamb, De Quincey, Carlyle, Macaulay, Dickens, Thackeray, George Eliot, Matthew Arnold, and Ruskin. Junior and Senior Elective; first term [2]. (Given 1903-1904.) Professor Henry van Dyke.
- 13 II. British Poetry of the Nineteenth Century. Wordsworth, Scott, Byron, Shelley, Keats, Tennyson, Keble, Arnold, William Morris, Elizabeth Barrett Browning, Robert Browning. Junior and Senior Elective; first term [2]. (Given 1904-1905.) Professor Henry van Dyke.
14. Seventeenth Century Dramatic Literature to the Restoration (1616-1660). Senior Elective; second term [2]. Professor Axson. Lectures.

16. Seventeenth Century Non-Dramatic Literature to the Restoration (1616-1660). Senior Elective; second term [2]. Professor Harper. Lectures.

ENGLISH SEMINARY

DIRECTOR, 1903-1904, PROFESSOR PARROTT

17. Advanced Old English. Restricted Senior Elective; first term [2]. Professor Hunt. *Harrison and Sharp*: Beowulf; *Hunt*: Caedmon's Exodus and Daniel; *Cook*: Cynewulf's Christ.
19. The Development of Prose Forms in English Literature. Senior Elective, open to approved Seniors; first term [2]. Professor Henry van Dyke.
21. Elizabethan Prose: Bacon and Milton. Lectures and textual study. Restricted Senior Elective; first term [2]. Mr. Tuckerman.
22. Eighteenth Century Prose. Addison, Gibbon, Swift, Walpole, Burke, Fielding, textual study; fortnightly essays. Restricted Senior Elective; second term [2]. Mr. Tuckerman.
23. Shakespeare: The Doubtful Plays. A study of the text and the authorship. Graduate course; first term [3]. Professor Parrott.
25. Gothic. Graduate course; first term [3]. Professor Hunt. *Wright*: Gothic Primer.

XIII. ORATORY

PROFESSOR COVINGTON

- 1, 2. Oratory: including the elocution and rhetoric of public address. Drill in gesture, vocal emphasis, declamation and the analysis and writing of themes. Freshman Required; both terms [2]. Professor Covington.

Raymond and Miller : The Speaker ; *Ringwalt* : Modern American Oratory ; or *Perry* : Selections from Burke. Rhetoric (see XII English above) may be substituted for this course, but one of the two courses must be taken. Both courses are scheduled as "English."

3. Argumentative Composition. A study of the principles of argumentation. Illustrative selections from American and British eloquence. Lectures, recitations, and exercises in brief-drawing. Sophomore Required; first term [2]. Professor Covington. English 3 (see XII above) may be substituted for this course, but one of the two courses must be taken. Both courses are scheduled as "English."
- a. Oratorical Composition and Delivery. Junior Optional; second term. Exercises at specified hours. Professor Covington.
- b. Oratorical Composition and Delivery. Senior Optional; first term. Exercises at specified hours. Professor Covington.

There are public contests for various prizes in oratory poetry, and disputation. (See heading "Prizes and Competitive Scholarships.")

COURSE IN DEBATE

The course in debating will occupy a continuous two hour session weekly during the first term, and be conducted by the Departments of Politics, History, Economics, and Oratory. The work of the course will include brief-drawing and the oral presentation of arguments, under the direction of the professors in charge. The course is an elective, open to both Seniors and Juniors, on the terms hereinafter described :

1. The number eligible to take this course shall be limited to forty, of which number not more than twenty shall be Seniors.

2. Only members of Whig or Clio Hall, in good and regular standing, may elect this course.

3. Each Hall, on the date when elective schedules must be filed, shall transmit to the Registrar a list containing the names of twenty Hall members eligible to the course, of whom not more than ten shall be Seniors.

4. Each Hall shall select its candidates upon some basis of merit, and shall neither designate their quotas simply by election, nor upon the nomination of officials or boards who are elected. Furthermore, no man may be put upon the list of either Hall, unless he has been an active member of that Hall, in good and regular standing, for at least one year preceding the filing of said lists. Honorable mention (or prizes taken) in competitive Hall debates shall entitle the winners to elect this course. In case an individual who has taken the course in his Junior year signifies his desire to take the same course in his Senior year, he shall have a right to do so, even in preference to those in his own class who have not taken the course in their Junior year, provided always he maintain a good and regular Hall standing, and provided that the professors in charge or any of them shall not debar him for poor work in the course in Junior year.

(See plan posted in Clio Hall or Whig Hall for further particulars.)

XIV. EXERCISES IN ENGLISH COMPOSITION

In addition to the exercises in narration and description, disputation and oratory, prepared in connection with the courses indicated under English and Oratory above, extended essays and other forms of composition are required in the Freshman, Sophomore, and Junior years, and in many of the elective courses open to Seniors. They are prepared under the supervision of the professors of English Literature, Discourse, and Oratory, and are carefully examined and

corrected. In every year of the course several prizes or honorary appointments are given for excellence in essay writing and in public address, either by the University, or by the Cliosophic or American Whig Societies, acting through committees appointed from their own members in the Faculty.

XV. GERMAN

PROFESSORS HOSKINS AND BLAU

- 1, 2. Elementary Course in Grammar, Reading, and Composition. Exercises in composition. Reading. Freshman Elective (Required for those not taking German 3, 4; 5, 6; or French); both terms [2]. Professor Hoskins. *Whitney*: Compendious German Grammar; *Harris*: German Reader; *Baumbach*: Nicotiana; *Zschokke*: Der Zerbrochene Krug.
- 3, 4. Intermediate Course in Grammar, Composition, and Reading. Freshman Elective (open to those who have passed the elementary examination for admission: Required for those not taking German 1, 2; 5, 6; or French); both terms [2]. Professor Hoskins. *Whitney*: German Grammar; *Harris*: German Reader; *Baumbach*: Der Schweigersohn; *Storm*: Immensee; *Bronson*: German Prose and Poetry.
- 5, 6. Advanced Course in Grammar, Syntax, Composition, and Reading. Freshman Elective (open to those who have passed the elementary examination for admission: Required for those not taking German 1, 2; 3, 4; or French); both terms [2]. Professor Hoskins. *Whitney*: Compendious German Grammar; *Harris*: German Composition; *Baumbach*: Die Nouna; *Heyse*: Die Blinden; *Freytag*: Die Journalisten.
- 7, 8. Modern German Prose and Poetry. Sophomore Elective; both terms [2]. Professor Blau. *Whitney*: Com-

pendious German Grammar; *Freytag*: Aus dem Jahrhundert des grossen Krieges; *Schiller*: Maria Stuart, der dreissig jährige Krieg, Wallenstein; *Schiller*: Lyric Poems.

11. Lessing's Life and Works. Lectures on German literature from the Thirty Years' War to Lessing's death. Junior Elective; first term [2]. Professor Hoskins. *Lessing*: Ausgewählte Werke.
12. Schiller's Life and Works. Lectures on Schiller. Junior Elective; second term [2]. Professor Hoskins. *Schiller*: Ausgewählte Werke.
- 13, 14. Goethe's Life and Works. Lectures and reading. Senior Elective; both terms [2]. Professor Blau. *Goethe*: Götz von Berlichingen, Werther's Leiden, Iphigenie, Faust, Gedichte.
15. Middle High German. Grammar, lectures, and reading. The course is designed both to furnish a foundation for the historical study of Modern German and to serve as an introduction to the study of Germanic Philology. Proficiency in Modern German is required. Graduate course, given 1902-1903; first term [3]. Professor Hoskins. *Paul*: Mittelhochdeutsche Grammatik; *Michels*: Mittelhochdeutsches Elementarbuch; *Weinhold*: Mittelhochdeutsches Lesebuch.
16. Old High German. Grammar, reading, and lectures on the historical development of the German language. Knowledge of Modern German and Middle High German required, and some knowledge of Gothic, useful. Graduate course; second term [3]. Professor Hoskins. *Braune*: Althochdeutsches, Lesebuch; *Braune*: Althochdeutsche Grammatik.
17. Historical German Grammar. Introduction, phonology, morphology. Requires a knowledge of Gothic, Old and Middle High German. Graduate course; first term [3]. Professor Hoskins. Lectures. References

to *Paul*: Grundriss Der Germanischen Philologie ;
Streitberg: Urgermanische Grammatik.

18. Old Icelandic. Grammar, lectures, and reading. For advanced students. Graduate course; second term [3]. Professor Hoskins. *Noreen*: Altisländische und altnorwegische Grammatik ; *Kahle*: Altisländisches Elementarbuch ; *Ranisch*: Die Volsungasaga.

For Gothic and Anglo-Saxon, see announcement of the English Department.

XVI. FRENCH

PROFESSORS A. G. CAMERON, LEWIS, AND VREELAND

- 1, 2. French. Freshman Elective (Required for those not taking French 3, 4, or German); both terms [2]. Professor Vreeland.
- 3, 4. French. Freshman Elective (open to those who have passed the advanced entrance requirement in French : Required for those not taking French 1, 2, or German); both terms [2]. Professor Vreeland.
5. French. Sophomore Elective; first term [2]. Professor A. G. Cameron or Professor Vreeland.
6. French. Sophomore Elective; second term [2]. Professor A. G. Cameron or Professor Vreeland.

Courses 5 and 6 will consist of reading: *Balzac*, *Coppée*, *Daudet*, *Dumas*, *Maupassant*, *Zola*, or others ; and lectures upon the historical development of Gallicisms, together with analytic and practical study of the idiomatic language.

- 7 1. French Literature. The fifteenth and sixteenth centuries and the nineteenth century. Lectures and reading. Junior and Senior Elective ; given 1903-1904 ; first term [2]. Professor A. G. Cameron.
- 8 1. French Literature. The seventeenth century and the nineteenth century. Lectures and reading. Junior

and Senior Elective; given 1903-1904; second term [2]. Professor A. G. Cameron.

- 7 II. French Literature. The thirteenth century and the nineteenth century, with particular study of Voltaire. Lectures and reading. Junior and Senior Elective; given 1904-1905; first term [2]. Professor A. G. Cameron.
- 8 II. French Literature. The fourteenth century and the eighteenth century. Lectures and reading. Lectures upon the ethics of France and of French literature to the Seniors in courses 8 I and 8 II. Junior and Senior Elective; given 1904-1905; second term [2]. Professor A. G. Cameron.

The French courses 9, 10, 11, and 12, given in the School of Science, are open also to Academic students.

- 13, 14. Old French Readings. This course is intended to give the student a good reading knowledge of old French, as well as to acquaint him with the literature of the period. *Gaston Paris*: Extraits de la Chanson de Roland is first read, then *Suchier*: Aucassin et Nicolette; *Warnke*: Die Lais de Marie de France; *Koschwitz*: Karls Reise; *Foerster*: Cligès. Senior Elective; both terms [2]. Professor Lewis.
15. Old Provençal Grammar and Introduction to Mediæval literature of the langue d'oc. Lectures on the history of Provence in its connection with literary development. Reading of selections from the Troubadours. Senior Elective; first term [2]. Professor Vreeland.
16. Old Provençal Readings. A continuation of the first term's work, with lectures on the lives and writings of the Troubadours. Senior Elective; second term [2]. Professor Vreeland.

ROMANCE SEMINARY

DIRECTOR, 1903-1904, PROFESSOR LEWIS

- 17, 18. Molière. A study of Molière's life, evolution, social satire, influence, and imitators. Graduate course; both terms [3]. Professor A. G. Cameron.
- 19, 20. Old French Philology. Graduate course; both terms [3]. Professor Lewis. Lectures on Old French etymology, morphology, and syntax.

XVII. ITALIAN

MR. AUSTIN

1. Elementary Italian. Junior and Senior Elective; first term [2]. Mr. Austin. *Grandgent*: Grammar; Alfieri's Autobiography.
2. Dante: Inferno. Junior and Senior Elective; second term [2]. Mr. Austin.
3. Dante: Purgatorio. Senior Elective; first term [2]. Mr. Austin.
4. Dante: Paradiso. Senior Elective; second term [2]. Mr. Austin.

XVIII. SPANISH

PROFESSOR LEWIS

- 1, 2. Modern Spanish. Junior and Senior Elective; both terms [2]. Professor Lewis. *Edgren*: Spanish Grammar; *Loiseaux*: An Elementary Spanish Reader; *Alarcón*: El Capitán Veneno; *Maratín*: El sí de las niñas.
3. Advanced Spanish. Senior Elective; first term [2]. Professor Lewis. Open to students who have satisfactorily completed courses 1 and 2. Class and collateral readings from modern authors.

4. Advanced Spanish. Senior Elective; second term [2]. Professor Lewis. Open to students who have satisfactorily completed course 3. Readings from Cervantes, Calderón, and Lope de Vega.

DEPARTMENT OF MATHEMATICS AND
NATURAL SCIENCE

XIX. MATHEMATICS

PROFESSORS FINE, THOMPSON, AND LOVETT, MR. WILSON,
DR. GILLESPIE, DR. EISENHART, AND DR. HUN

1. Trigonometry. Definitions of the six trigonometric functions as ratios, relations between these six functions, values of the functions for 0° , 30° , 45° , 60° , 90° , 120° , 135° , etc., etc., formulas for the sine, cosine, and tangent of the sum or difference of two angles for all angles, formulas for the sum or difference of two sines or two cosines, expressions for the functions of double and half angles, trigonometric identities and equations, theory of logarithms and the use of trigonometric tables, and the solution of right and oblique plane triangles. The circular measure of angles. The inverse trigonometric functions. Freshman Required; first term [2]. Professor Thompson, Mr. Wilson, Dr. Gillespie, or Dr. Eisenhart.
3. Solid and Spherical Geometry and Mensuration. Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, parallelepipeds, pyramids and the regular solids, of cylinders, cones, and spheres, of spherical triangles; and the mensuration of these solids and their surfaces. Freshman Required; first term [2]. Professor Thompson, Dr. Gillespie, Dr. Eisenhart, or Dr. Hun. *Thompson*: Elementary Solid Geometry.

4. Selected portions of Algebra and Elementary Theory of Equations. The elementary treatment of infinite series, undetermined coefficients, the binomial theorem for fractional and negative exponents, the theory of logarithms, determinants, and the elements of the theory of equations, including Horner's method for solving numerical equations. Freshman Required ; second term [4]. Professor Fine, Dr. Gillespie, Dr. Eisenhart, or Dr. Hun. *Fine*: College Algebra.
5. Conic Sections, treated from the Cartesian standpoint. Sophomore Required; first term [3]. Professor Thompson, Mr. Wilson, Dr. Gillespie, or Dr. Eisenhart.
- 7, 8. Differential and Integral Calculus. Sophomore Elective ; both terms [2]. Professor Fine. *Osborne*: Differential and Integral Calculus.
- 9, 10. Calculus and Elementary Differential Equations. Junior and Senior Elective; both terms [2]. Professor Fine. Lectures. *Murray*: Differential Equations.
11. Analytic Geometry of Three Dimensions ; the plane, straight line, and quadric surface. Junior and Senior Elective ; first term [2]. Professor Thompson. *C. Smith*: Solid Geometry.
12. Analytic Geometry of Three Dimensions ; theory of surfaces and curves. Junior and Senior Elective ; second term [2]. Professor Thompson. Lectures. *C. Smith*: Solid Geometry.
14. Analytical Mechanics. Junior and Senior Elective ; second term [2]. Professor Loomis. *Ziwet*: Theoretical Mechanics.
15. Curves in a Plane and in Space. Senior Elective ; first term [2]. Professor Thompson.
16. Infinitesimal Geometry. Introductory course. Senior Elective; second term [2]. Professor Thompson. Lectures.

- 17, 18. Advanced Calculus and Elements of the theory of Functions. Elementary course. Senior Elective; both terms [2]. Professor Fine. Lectures. *Harkness and Morley*: Introduction to Analytic Functions.
21. Theory of Substitutions. Graduate course; first term [2]. Dr. Gillespie.
22. Theory of Invariants. Graduate course; second term [2]. Dr. Gillespie.
23. Theory of Functions of a complex Variable. Advanced course. Graduate course; first term [2]. Professor Fine.
24. Theory of Ordinary Differential Equations. Graduate course; second term [2]. Professor Fine.
26. Elliptic Functions. Graduate course; second term [2]. Mr. A. H. Wilson.
28. Partial Differential Equations. Graduate course; second term [2]. Professor Lovett. *Goursat*.
- 29, 30. Lie's Transformation Groups with Applications to Differential Equations and Geometry. Graduate course; both terms [2]. Professor Lovett.
31. Infinitesimal Geometry. Graduate course; first term [2]. Professor Thompson.
32. Finite and Infinitesimal Deformations of Surfaces. Graduate course; second term [2]. Dr. Eisenhart.
34. Congruences and Complexes. Graduate course; second term [2]. Dr. Eisenhart.
- 35, 36. Special Topics in Metrical Geometry. Historical readings of some of the memoirs of Monge, Dupin, Gauss, Weingarten, Darboux, and Bianchi. Graduate course; both terms [2]. Professor Thompson.
38. The Differential Equations of Mechanics, in particular, their periodic solutions. Graduate course; second term [2]. Professor Lovett.
40. Analytical Mechanics. Graduate course; second term [2]. Professor Lovett.

- 41, 42. Special Topics in Mechanics. Historical readings. Graduate course; both terms [2]. Professor Lovett.

MATHEMATICAL SEMINARY

DIRECTOR, 1903-1904, PROFESSOR THOMPSON

XX. ASTRONOMY

PROFESSORS YOUNG AND REED

1. Elementary Astronomy. Recitations from text-book, lectures, Junior Elective, Academic and B. S.; first term [3]. Professor Young. *Young*: Manual of Astronomy.
3. General Astronomy. Extended course. Astronomical instruments and methods; determination of the principal astronomical constants; eclipses and their calculation; undisturbed planetary motion; spectroscopic astronomy. Lectures and recitations. Open to students of both Academic and Scientific departments who have satisfactorily completed course 1, and in Physics courses 2 and 3. Senior Elective; first term [2]. Professor Young. *Young*: General Astronomy, revised edition.
- 5, 6. Practical Astronomy (elementary course); determination of time, latitude and azimuth, work with the equatorial on double-stars, variable stars and the sun. Two classroom exercises with the necessary observatory work. Senior Elective; (both Academic and Scientific) both terms [2]. Professor Reed. *Campbell*: Practical Astronomy; also an elementary text-book on spherical trigonometry.
- 7, 8. Celestial Mechanics. Lectures and collateral reading. Graduate course; both terms [2]. Professor Lovett.
- 9, 10. Theoretical Astronomy and the calculation of orbits. Graduate course; both terms [2]. Professor Young.

Watson: Theoretical Astronomy; *Oppolzer*: Bahnbestimmung; *Klinkerfues*: Theoretische Astronomie.

- 11, 12. Practical Astronomy (extended course). Special subjects more thoroughly developed than in courses 5, 6. Graduate course; both terms [3]. Professor Reed. *Chauvenet*: Practical Astronomy.

XXI. PHYSICS

PROFESSORS BRACKETT, MAGIE, LOOMIS, AND McCLENAHAN,
DR. P. E. ROBINSON, AND MR. ADAMS

2. Elementary Mechanics; mechanics of masses and molecular mechanics. Sophomore Required; second term [2]. Professor Magie. *Anthony and Brackett*: Elementary Text-book of Physics, Revision, 1896.
3. General Physics; heat, electricity, light. Recitations and experimental lectures. Junior Required; first term [3]. Professor Magie. *Anthony and Brackett*: Elementary Text-book of Physics, Revision, 1896.
- 4 I. Theory of Heat, lectures on thermodynamics and on its application to chemical physics. (Given 1903-1904, alternating with 4 II.) Junior and Senior Elective; second term [2]. Professor Magie.
- 4 II. Theory of Light, with experimental demonstrations. (Given 1904-1905.) Junior and Senior Elective; second term [2]. Professor Magie.
5. Theory of Electricity. Senior Elective; first term [2]. Professor Magie. *J. J. Thomson*: Elements of Electricity and Magnetism.
6. Analytical Mechanics. (Math. 14.) The elements of the subject, open to those who have taken mathematics 7, 8. Junior and Senior Elective; second term [2]. Professor Loomis. *Ziwet*: Theoretical Mechanics.
7. Chemical Physics. The study of the modern theories of solutions. Senior Elective; first term [2]. Professor Loomis.

8. Practical Physics. Experimental work in mechanics and heat, with collateral lectures and recitations. Junior and Senior Elective; second term [2]. Professor McClenahan. *Ames and Bliss : Manual.*
9. Practical Physics. Experimental work in electricity, with lectures on the theory of electrical measurements. Senior Elective; first term [2]. Professor McClenahan. *Ames and Bliss : Manual.*
10. Practical Physics. Experimental study of special subjects, and advanced measurements. Senior Elective; second term [2]. Professor McClenahan.
- 11, 12. History of Natural Philosophy. Senior Elective; both terms [2]. Professor Brackett. Lectures.
- 13, 14. Theory of Electricity. Graduate course ; both terms [3]. Professor Brackett. First term; *Duhem : L'Electricité et le Magnétisme.* Second term; *Drude : Die Physik des Aethers.*
- 15, 16. Absolute measurements in Electricity and Magnetism. Graduate course; both terms [4-6]. Professor McClenahan. *Gray.*
- 17, 18. Laboratory practice in Physics. Graduate course; both terms [3]. Professor McClenahan.
20. Theory of heat. Graduate course; second term [3]. Professor Loomis.
21. Elasticity. Graduate course; first term [3]. Professor Loomis.
22. Chemical Physics. Graduate course; second term [3]. Professor Loomis.
- 23, 24. Theory and Practice of Exact Measurements. Graduate course; both terms [3]. Professor Loomis.
- 25, 26. Research work in Physics. Graduate course; both terms. Number of hours indefinite. Professors Magie and Loomis.

The Physical Laboratory is open throughout the week to graduate students.

XXII. CHEMISTRY

PROFESSORS CORNWALL, McCAY, AND NEHER

2. General Chemistry. Experimental lectures and written recitations. Sophomore Required; second term [3]. Professor McCay. *Newth*: Inorganic Chemistry.
3. General Chemistry. Chemical theory and the elements of organic chemistry. Junior Elective; first term [2]. Professor McCay. *Dobbin and Walker*: Chemical Theory; *Meyer*: Outlines of Theoretical Chemistry; *Ostwald*: Outlines of General Chemistry; *Remsen*: Organic Chemistry.
5. Qualitative Analysis. Introductory course, embracing a preliminary experimental study of the more important reactions made use of in analytical chemistry. Junior Elective; first term [4]. Professor Neher.
6. Qualitative Analysis. Continuation of course 5, comprising the systematic analysis of complex mixtures, minerals, metallurgical products, etc., as well as the study of the theory of analytical chemistry. Junior Elective; second term [4]; prerequisite, course 5. Professor Neher.
7. Laboratory Chemistry. Lectures, recitations, and laboratory work; qualitative analysis of simple salts; experimental chemistry; sugar, milk, drinking water, poisons, and the more important organic compounds. Senior Elective; first term [2]. Professor Cornwall. (Not open to students who have taken 5.)

Note. Applied Chemistry 11 (School of Science courses), is open to all Senior Academic students as a first term elective [2].

9. Quantitative Analysis. The theory and practice of typical gravimetric volumetric methods of analysis.

- Senior Elective; first term [4]; prerequisites, courses 5 and 6. Professor Neher.
10. Quantitative Analysis; advanced course. The study of special analytical methods, including the analysis of organic compounds. Senior Elective; second term [2]; prerequisites, courses 5, 6 and 9. Professor Neher.
11. Organic Chemistry. The study of the properties, synthesis, and structure of the most important classes of carbon compounds of the aliphatic series. Lectures and recitations. Senior Elective; first term [2]; prerequisites, courses 5 and 6. Professor Neher.
12. Organic Chemistry. Aromatic compounds. Lectures and recitations. Senior Elective; second term [2]; prerequisites, courses 5, 6 and 11. Professor Neher.
14. Organic Chemistry. Preparation and experimental study of typical carbon compounds. Lectures, recitations and laboratory work. Senior Elective; second term [4]; prerequisites, courses 5, 6, 9 and 11. Professor Neher.

A fee of \$10 is charged in each of courses 5, 6, 7, 9, 10, and 14; furthermore apparatus deposits are required as follows: courses 5 and 6, \$10 per term; course 7, \$6 per term; courses 9, 10 and 14, \$15 per term.

XXIII. PHYSICAL GEOGRAPHY

PROFESSOR LIBBEY

2. Physical Geography. (a) Morphology of the continents. (b) Oceanography. Junior Elective; second term [2]. Professor Libbey. *Guyot*: Physical Geography; *Tarr*: Elementary Physical Geography; *Mill*: Realm of Nature.
4. Physical Geography. (c) Climatology. Senior Elective; second term [2]. Professor Libbey. *Guyot*: Physical Geography; *Davis*: Elementary Meteorology.

6. Physical Geography. (d) The Relation of the Earth to the History of Mankind. Senior Elective; second term [2]. Professor Libbey.

XXIV. GEOLOGY

PROFESSORS SCOTT, AND CORNWALL, DR. FARR AND
MR. VAN INGEN

2. Geology; elementary course. General outline of the subject, including dynamical, structural, and historical geology. Junior Elective, except for those who elect 3, 4; second term [2]. Professor Scott. *Scott* : Introduction to Geology.
3. Geology (Mineralogy). Lectures, recitations, and practice in theoretical, descriptive and determinative mineralogy; a study of the commoner minerals in general, but with especial reference to the constituents of rocks. Junior Elective; first term [2]. Professor Cornwall. *Moses and Parsons* : Mineralogy.
4. Physical Geology. Advanced course in dynamical, structural and physiographical geology, with provision for laboratory and field work and excursions. Junior Elective; second term [2]. Professor Scott and Dr. Farr. *Scott* : Introduction to Geology; *Green* : Geology for Students; *Dana* : Manual of Geology.
- 5, 6. Historical Geology; advanced course. The detailed study of the geological periods, their distribution, stratigraphy and paleontology. Laboratory and field work and excursions, in addition to the lectures. Senior Elective; both terms [2]. Professor Scott and Mr. van Ingen. *Scott* : Introduction to Geology; *Dana* : Manual of Geology; *Kayser* : Text-book of Comparative Geology.
7. Economic Geology. Graduate course; first term [3]. Dr. Farr.

XXV. BIOLOGY

PROFESSORS MACLOSKIE, SCOTT, RANKIN, MCCLURE,
DAHLGREN, AND DR. FARR

3. General Biology. Lectures on the principles of biological science, with laboratory work. Junior Elective; first term [2]. Professor Rankin. *Sedgwick and Wilson*: General Biology; *Parker and Haswell*: A Manual of Zoology; *Heald*: Elementary Biology.
4. Practical Botany. Laboratory work in vegetable anatomy, histology and medical botany. Junior Elective; second term [2]. Professors Macloskie and Rankin. *Bower*: Practical Botany; *Macdougall*: Elementary Plant Physiology; *Pfeffer*: Physiology of Plants; *Leavitt*: Outlines of Botany.
6. Vertebrate Anatomy. Lectures and dissections of vertebrates. Junior Elective; second term [2]. Professor McClure. *Marshall and Hurst*: Practical Zoology; *Kingsley*: Vertebrate Zoology.
8. Invertebrate Morphology. Junior and Senior Elective, open only to students who have taken course 3; second term [2]. Professors Macloskie and Rankin.
10. Normal Histology. Lectures, demonstrations, and laboratory practice in microscopical anatomy. Junior and Senior Elective; second term [2]. Professor Dahlgren. *Schaefer, Prudden, Piersol*.
11. Comparative Osteology. Lectures and study of skeletons in the museum. For students contemplating the medical profession. Senior Elective; first term [2]. Professors Macloskie and Scott. *Flower*: Osteology of the Mammalia; *Reynolds*: The Vertebrate Skeleton.
12. Practical Histology. Practical work in hardening, injecting, section cutting, etc., involved in histology. Study of the histology of the eye, ear, teeth, and nervous

system, spermatogenesis and ovogenesis. Senior Elective; open only to those who have taken 10 in Junior year; second term [2]. Professor Dahlgren. *Whitman, Lee*.

13. Physiology. Lectures on methods and results, including the functions of the body in health and disease. Senior Elective; first term [2]. Professor Macloskie. *Kirkes: Handbook of Physiology; Schaefer: Physiology*.
14. Embryology of Vertebrates. Lectures and laboratory work. Senior Elective; second term [2]. Professor McClure. *Hertwig, Minot*.
15. Mammalian Anatomy. Lectures and laboratory work. Senior Elective; first term [2]. Professor McClure.
- 17, 18. Paleontology, morphology of the extinct vertebrates and phylogeny of existing forms. Senior Elective; both terms [2]. Professor Scott and Dr. Farr. *A. S. Woodward: Text-book of Paleontology*.
19. The Nervous System and its terminal organs. Senior Elective; first term [2]. Professor McClure. Lectures and laboratory work. *Edinger, Barker*.
22. (Ment. Phil. 22.) Theories of Heredity and Descent. General treatment by lectures on the important questions in evolution. Senior Elective; second term [2]. Professor Baldwin. *Baldwin: Development and Evolution; Conn: The Method of Evolution*.
- 23, 24. Cytology, Histogenesis, and Comparative Histology. Lectures and the practical study of the cell and its organs. Comparative studies of several tissues. Histogenesis, repair and regeneration of the tissues. Methods of research and thesis work. Professor Dahlgren. Graduate course; both terms [3]. A fee of \$25 is charged for apparatus and reagents.
- 25, 26. Systematic Botany of the Vascular Plants. Graduate course; both terms [3]. Professor Macloskie.

- 27, 28. The Morphology and Phylogeny of the organ systems of vertebrates. Research course. Graduate course ; both terms. Professor McClure.
- 29, 30. Comparative Morphology of the Invertebrates. Graduate course ; both terms [3]. Professor Rankin.
31. Paleontology of Mammals. Graduate course ; first term [3]. Professor Scott.
32. Paleontology. The Morphology and Phylogeny of living and extinct vertebrates other than mammals. Graduate course ; second term [3]. Dr. Farr.

Students entering for *Special Honors in Biology* must pursue 3-6, and 10-15 inclusive, and may also take course 8, under the usual regulations of Special Honor work. To fill the six hours elective work Seniors may elect Laboratory Chemistry, or Practical Physics, first term.

In courses 6, 14, and 15, a small fee is charged to cover the cost of dissecting materials and reagents.

In course 10 a fee of \$5 and in course 12 a fee of \$10 is charged to cover materials and specimens used. Each student retains the specimens mounted by him as well as a set given him by the laboratory to study.

In courses 23 and 24 a fee of \$25 covers the expenses of both courses.

Students who contemplate entering the medical profession may combine the electives in biology and chemistry, so as to receive when graduating a special certificate recommending them to medical colleges which have a four years' course.

XXVI. LECTURES ON HYGIENE

COL. WOODHULL

1. Personal Hygiene : to include elementary anatomy and physiology and the general care of the body ; the principles of exercise, food, clothing, and ventilation ; the

action of tobacco and alcohol, avoidable diseases and their consequences, and the essentials of first aid. Freshman Required; first term [1]. Col. Woodhull.

2. General Sanitation: to include water supply, sewerage and ventilation in their domestic relations, building sites, preventable diseases in connection with the public health, and the elements of public hygiene. Senior Elective; second term [2]. Col. Woodhull.

XXVII. LECTURES ON MUSIC

MR. PEASE

- 1, 2. Harmony. This course begins with the elementary principles of musical theory, including intervals, scales, and notation, followed by the study of chords in their various relations, triads and seventh chords with their inversions, altered chords, passing and changing notes, suspensions, cadences, sequences, organ point, modulation and the harmonizing of melodies. Students desiring to take this course must satisfy the instructor in advance as to their musical qualifications. Ability to play the pianoforte or an equivalent instrument is required. Recitations and written exercises. Senior Elective; both terms [2]. Mr. Pease.
4. Counterpoint. This course requires a thorough knowledge of the principles of harmony and marks the beginning of actual composition. The work consists in general in the harmonizing of melodies and chorals, selected as canti fermi, with other voices. Two, three, and four part counterpoint. Double counterpoint. Open to properly qualified Seniors; second term [2]. Mr. Pease.
6. History of Music. The evolution of musical art is traced from the earliest times to the present and an inquiry made into the music systems of the Greeks and other

ancient nations, the early Christian music, the Troubadours and Minnesingers, the beginning and development of opera, oratorio and instrumental music, together with a consideration of the works of the great composers and the various forms of composition. This course is one not requiring any technical skill of the student as it treats of the art from the æsthetic and historical standpoint. Lectures and classroom illustrations. Junior elective; second term [2]. Mr. Pease.

EXHIBIT OF STUDIES FOR 1903-1904

NOTE.—The numbers indicate hours per week. Each elective course takes two hours weekly, except in special courses.

FRESHMAN YEAR

REQUIRED

<i>First Term</i>		<i>Second Term</i>	
Latin	4	Latin	4
Greek	4	Greek	4
Mathematics	4	Mathematics	4
English	2	English	2
Hygiene	1		
	<hr style="width: 10%;"/>		<hr style="width: 10%;"/>
	15 hours.		14 hours.

ELECTIVE

(Students to take one elective—2 hours.)

German	2	German	2
French	2	French	2
	<hr style="width: 10%;"/>		<hr style="width: 10%;"/>
	17 hours.		16 hours.

SOPHOMORE YEAR

REQUIRED

<i>First Term</i>		<i>Second Term</i>	
Latin	2	Latin	2
Greek	2	Greek	2
Mathematics	3	Physics 2	2
History	2	Chemistry 2	3
English	2	Mental Philosophy 2	2
	<hr style="width: 10%;"/>		<hr style="width: 10%;"/>
	11 hours.		11 hours

ELECTIVE

(Students to take two electives—4 hours.)

<i>First Term</i>		<i>Second Term</i>	
Latin	2	Latin	2
Greek	2	Greek	2
Mathematics	2	Mathematics	2
French	2	French	2
German	2	German	2
<hr/>		<hr/>	
15 hours.		15 hours	

JUNIOR YEAR

REQUIRED

<i>First Term</i>		<i>Second Term</i>	
Mental Philosophy 3	2	Moral Philosophy 2	2
Physics 3	3	Political Economy 2	3
<hr/>		<hr/>	
5 hours.		5 hours.	
Five electives	10 hours.	Five electives	10 hours.
<hr/>		<hr/>	
15 hours.		15 hours.	

JUNIOR ELECTIVE COURSES

The elective courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Juniors only.

As some of these courses are given at the same hours, they are mutually exclusive. These exclusions in elective courses are shown in the weekly schedules on the following pages :

<i>First Term</i>	<i>Second Term</i>
PHILOSOPHY	
<i>Mental Philosophy</i> 5 I	Mental Philosophy 4
Mental Philosophy 9	<i>Mental Philosophy</i> 6 I
	Mental Philosophy 10
HISTORY	
<i>History</i> 5 II	<i>History</i> 6 II
History 7	History 8
<i>History</i> 9 II	<i>History</i> 10 II
<i>History</i> 11	
JURISPRUDENCE AND POLITICS	
<i>Jur. & Pol.</i> 1 I	<i>Jur. & Pol.</i> 2 I

ARCHÆOLOGY AND ART

*Arch. & Art 1**Arch. & Art 2*

CLASSICS

*Greek 9 1**Greek 10**Greek 11**Greek 12**Latin 9**Latin 10**Latin 11*

MODERN LANGUAGES

*English 5**English 6**English 7**English 8**English 9**English 10**English 13 1**Oratory a (optional)**German 11**German 12**French 7 1**French 8 1**Italian 1**Italian 2**Spanish 1, 2**Spanish 1, 2*

MATHEMATICS

*Mathematics 9, 10**Mathematics 9, 10**Mathematics 11**Mathematics 12**Mathematics 14*

PHYSICAL SCIENCE

*Astronomy 1**Physics 4 1**Chemistry 3**Physics 6**Chemistry 5**Physics 8**Chemistry 6*

NATURAL SCIENCE

*Geology 3**Physical Geography 2**Biology 3**Geology 2**Geology 4**Biology 4**Biology 6**Biology 8**Biology 10*

MUSIC

Music 6

SENIOR YEAR

<i>First Term</i>		<i>Second Term</i>	
Seven electives	14 hours.	Seven electives	14 hours.

SENIOR ELECTIVE COURSES

The elective courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Seniors only.

As some of these courses are given at the same hours, they are mutually exclusive. These exclusions in elective courses are shown in the weekly schedules on the following pages :

<i>First Term</i>	<i>Second Term</i>
PHILOSOPHY	
Moral Philosophy 3, 4	Moral Philosophy 3, 4
Moral Philosophy 5	<i>Mental Philosophy</i> 6 I
Moral Philosophy 9	Mental Philosophy 14
<i>Mental Philosophy</i> 5 I	Mental Philosophy 16
Mental Philosophy 13	Mental Philosophy 17, 18
Mental Philosophy 17, 18	Mental Philosophy 20
Mental Philosophy 19	Mental Philosophy 22

HISTORY

<i>History</i> 5 II	<i>History</i> 6 II
<i>History</i> 9 II	<i>History</i> 10 II
<i>History</i> 11	History 14
History 13	History 15, 16
History 15, 16	History 18

JURISPRUDENCE AND POLITICS

<i>Jur. & Pol.</i> 1 I	<i>Jur. & Pol.</i> 2 I
Jur. & Pol. 3	Jur. & Pol. 4
Jur. & Pol. 5	Jur. & Pol. 6, 7
Jur. & Pol. 6, 7	

POLITICAL ECONOMY AND SOCIOLOGY

Pol. Econ. & Soc. 3	Pol. Econ. & Soc. 4
Pol. Econ. & Soc. 5 a	Pol. Econ. & Soc. 6 b
(Pol. Econ. & Soc. 7)	
Pol. Econ. & Soc. 11	

ARCHÆOLOGY AND ART

Arch. & Art 1
Arch. & Art 3
Arch. & Art 7, 8

Arch. & Art 2
Arch. & Art 4
Arch. & Art 7, 8

ARCHITECTURE

Architecture 1, 2
(Architecture 3, 4)

Architecture 1, 2
(Architecture 3, 4)

CLASSICS

(Including Semitics and Indo-Iranian)

Semitics 1, 2
Indo-Iranian 1, 2
Greek 9 1
Greek 11
Greek 13 1
(Greek 15, 16)
Latin 13
Latin 17
Latin 19 1

Semitics 1, 2
Indo-Iranian 1, 2
Greek 10
Greek 12
Greek 14
(Greek 15, 16)
Greek 18
Latin 14
Latin 18
Latin 20
Latin 30

MODERN LANGUAGES

English 9
English 11
English 13 1
(English 17)
(English 19)
(English 21)
Oratory b (optional)
German 13, 14
French 7 1
French 13, 14
French 15
Italian 1
Italian 3
Spanish 1, 2
Spanish 3

English 10
English 12
English 14
English 16
(English 22)
German 13, 14
French 8 1
French 13, 14
French 16
Italian 2
Italian 4
Spanish 1, 2
Spanish 4

MATHEMATICS

Mathematics 9, 10
Mathematics 11
 Mathematics 15
 Mathematics 17, 18

Mathematics 9, 10
Mathematics 12
Mathematics 14
 Mathematics 16
 Mathematics 17 18

PHYSICAL SCIENCE

Astronomy 3
 Astronomy 5, 6
 Physics 5
 Physics 7
 Physics 9
 Physics 11, 12
 Chemistry 7
 *Applied Chemistry 11 (S)
 Chemistry 9
 Chemistry 11

Astronomy 5, 6
Physics 4 1
Physics 6
Physics 8
 Physics 10
 Physics 11, 12
 Chemistry 10
 Chemistry 12
 Chemistry 14

NATURAL SCIENCE

Geology 5, 6
 Biology 11
 Biology 13
 Biology 15
 Biology 17, 18
 Biology 19

Physical Geography 4
 Physical Geography 6
 Geology 5, 6
Biology 8
Biology 10
 Biology 12
 Biology 14
 Biology 17, 18
 Biology 22

HYGIENE

General Sanitation 2

MUSIC

Music 1, 2

Music 1, 2
 (Music 4)

* School of Science courses.

ACADEMIC FRESHMAN FIRST TERM SCHEDULE—1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8		ii, v Hygiene i French iv German	iii, vi Hygiene ii French iv German	i, iv Hygiene ii French v German	iv Livy v Greek 3	iii L. P. v Greek 3
9		iii French vi German	ii French v German	ii French v German	i Livy ii Livy v Livy vii Greek 3	vi Greek 3 vii Greek 3
10	i Math 1 ii Math 1 iii Math 1 v Math 1 vii Math 1	β [18 i δ [28 iii Math 1 ε [19 v Math 1 ζ [29 vii Math 1	ii Greek 1 iii Greek 3 iv L. P. vii Livy	ε [12 i Greek 3 δ [12 ii Livy γ [17 iii Livy δ [16 iv Greek 1 v L. P. vii Livy viii Livy	ε [12 i Greek 3 δ [12 ii Greek 1 γ [13 iii Livy δ [17 vii Livy ε [17 vii Livy	ε [12 i Greek 3 δ [12 ii Livy γ [13 vii Livy δ [17 vii Livy
11	ii Math 1 iv Math 1 vi Math 1 viii Math 1	δ [28 i Math 1 ε [19 iv Math 1 ζ [29 vi Math 1 β [18 vii Math 1	i Livy ii Livy iii Greek 1 v Greek 1	γ [16 i Livy δ [12 ii Greek 1 ε [12 iv Livy δ [13 vi Greek 1 vii L. P.	δ [12 i Greek 1 ε [12 ii Livy δ [12 iii Greek 1 ε [12 iv Greek 1 vii Livy viii L. P.	ε [12 i L. P. δ [12 ii Livy γ [13 iii Greek 3 δ [17 vii Livy ε [17 vii Livy
3				i English iv English	i English	
4	i Math 1 iii Math 1 v Math 1 vii Math 1	β [18 i Math 1 δ [28 iii Math 1 ε [19 v Math 1 ζ [29 vii Math 1		i Greek 1 iii Greek 3 v Greek 3 vii English v English	δ [12 i Greek 3 ε [12 ii Greek 1 γ [16 vi Livy δ [17 vii English ε [17 vii English	
5	ii Math 1 iv Math 1 vi Math 1 viii Math 1	δ [28 i Math 1 ε [19 iv Math 1 ζ [29 vi Math 1 β [18 vii Math 1		ii L. P. iii L. P. iv Greek 1 vii Greek 3 vi English	ε [12 i Greek 3 δ [12 ii Livy γ [12 iv Livy δ [12 v Greek 1 ε [12 vii English	ε [12 i L. P. δ [12 ii Livy γ [12 iii Greek 3 δ [12 iv English

Roman numerals indicate divisions. Arabic numerals after brackets indicate rooms.

WEEKLY SCHEDULES

ACADEMIC FRESHMAN SECOND TERM SCHEDULE--1998-1993

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8	I French IV German	I French IV German	I French IV German	I French IV German	I Mem III Tac V Tac VII Tac	IV Herod V Tac VII Tac
9	III French VI German	III French VI German	III French VI German	III French VI German	II Herod IV Tac V Mem VI Herod	II Herod III Mem IV Herod
10	I Math 4 III Math 4 V Math 4 VII Math 4	I Math 4 III Math 4 V Math 4 VII Math 4	II-IV Rom Hist V Mem VII Tac	II Mem III Tac V Mem VII Rom Hist	I Herod II Mem III Tac V Mem VII Herod	I Herod II Tac III Mem IV Mem VII Herod
11	II Math 4 IV Math 4 VI Math 4 VIII Math 4	II Math 4 IV Math 4 VI Math 4 VIII Math 4	II-IV Rom Hist V Mem	II Mem III Tac V Mem VII Rom Hist	II Herod III Mem IV Tac V Mem VII English	II Tac III Herod IV Herod V Mem
12				English	English	
13				English	English	
14	I Math 4 III Math 4 V Math 4 VII Math 4	I Math 4 III Math 4 V Math 4 VII Math 4		I Tac III Mem V Tac VII English	I Tac III Tac V Tac VII Mem	I Tac III Tac V Tac VII Mem
15	I Math 4 III Math 4 V Math 4 VII Math 4	I Math 4 III Math 4 V Math 4 VII Math 4		II Tac IV Tac VI Tac VIII Mem	II Tac III Tac IV Tac V Tac VI Tac VII Tac	II Tac III Tac IV Tac V Tac VI Tac VII Tac

Roman numerals indicate divisions. Arabic numerals after brackets indicate rooms

ACADEMIC SOPHOMORE FIRST TERM SCHEDULE—1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8			i El. Latin ζ [17]	i El. Latin ζ [17]	ii German [7	
9	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	ii German [7
10	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i ENGLISH ii ENGLISH iii ENGLISH [14] [21]
11	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	ii ENGLISH iv ENGLISH [14]
3	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	
4	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i LATIN iii GREEK iv GREEK v, vi El. Greek δ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	
5	i French ii French iii German [6] [5] [7]	i French ii French iii German [6] [5] [7]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i MATH ii MATH iii MATH iv MATH v MATH vi MATH vii MATH viii MATH ix Latin ζ [17] α [12] β [4]	i ENGLISH ii ENGLISH iii ENGLISH [14] [21]

Required studies in SMALL CAPITALS. Roman numerals indicate divisions, Arabic numerals after brackets indicate rooms. Divisions independent in Required Classics and Required Mathematics. History takes English divisions.

ACADEMIC SOPHOMORE SECOND TERM SCHEDULE—1908-1909

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8		iii Greek a [19]	i Latin ii Latin γ [16] ε [17]	i Latin ii Latin γ [16] ε [17]	i German ii German [5] [7]	i German ii German [5] [7]
9		i Greek a [19]	i Chem ii Greek a [19]	i Chem ii Chem [19] [18]	i Chem ii Chem [19] [18]	i German ii German [5] [7]
10	i, ii Latin iii Greek β [14] α [4]	ii Greek i, ii, iii Latin iii Greek a [19] β [14] ε [4]	ii Greek a [19]	ii Greek iii German a [19] β [14] ε [4]	ii Mech iii German [5] [7]	ii Mech iii German [5] [7]
11	iv Greek v Greek vi Latin β [13] α [4]	iv Greek v Greek vi Latin β [13] α [4]	ii Chem i Greek a [19]	ii Chem iii Chem [19] [18]	ii Chem iii Mech [19] [18]	i Mech [19] [18]
3	i Greek v Latin γ [13] β [14]	i Greek iv Latin γ [13] β [14]		i Logic ii Logic [8] [8]	i Logic ii Logic [8] [8]	
4	ii Greek iii, iv Latin vi Greek ii French β [14] γ [13] γ [13] 6	ii Greek iii, iv Latin vi Greek ii French β [14] γ [13] γ [13] 6				
5	i French iii French [5] [6]	i French iii French [5] [6]				

Required studies in SMALL CAPITALS. Roman numerals indicate divisions, Arabic numerals after brackets indicate rooms. Chemistry, Logic, and Mechanics take the same divisions.

ACADEMIC JUNIOR FIRST TERM SCHEDULE—1993-1994

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8	(Physics) [8 23]	(Physics) [8 23]	Chemistry 5 Engl Lit 7	Chemistry 5 Engl Lit 7	Prod. of Shakes [14]	Prod. of Shakes [14]
9	(Physics) [8 23] <i>Roman Hist</i>	(Physics) [8 23] <i>Roman Hist</i>	<i>Hist of Phil</i> [8]	<i>Hist of Phil</i> [8]	Psychology [8]	Psychology [8]
10	<i>Jur & Pol</i> 1 [21]	<i>Jur. & Pol.</i> 1 [21]	<i>10th Cent Writ</i> [2] History [14] Theor Chem 3	<i>10th Cent Writ</i> [2] History [14] Theor Chem 3	<i>French Lit</i> [8]	<i>French Lit</i> [8]
11	<i>Art</i> 1 Astronomy 1 [5] <i>Spanish</i> 1 [7]	<i>Art</i> 1 Astronomy 1 [5] <i>Spanish</i> 1 [7]	<i>History</i> 9 [21] Astronomy 1 [8 23] Juvenal 9 [14]	<i>History</i> 9 [21] Juvenal 9 [14]	Psychology [8] German [5] Geology 3	Psychology [8] German [5] Geology 3
3	<i>Old Eng</i> [2] <i>Solid Geom</i> [18] <i>Hist Music</i> [26]	<i>Old Eng</i> [2] <i>Solid Geom</i> [18] <i>Hist Music</i> [26]		2 p.m. Biology 3 <i>Italian</i> 1 [7]	2 p.m. Biology 3 <i>Italian</i> 1 [7]	
4	1 Physics [8 23]	1 Physics 23		<i>Med</i> Adv. Logic [16] <i>Bible</i> [8cm] <i>Diff Eq</i> [19]	<i>Med</i> Adv. Logic [16] <i>Bible</i> [8cm] <i>Diff Eq</i> [19]	
5	11 Physics [8 23] Roman Elegy [17]	11 Physics [8 23] Roman Elegy [17]		Ethics [21]	Ethics [21]	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors. Electives in Roman open to Juniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC JUNIOR SECOND TERM SCHEDULE—1902-1903

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8		(Pol Econ)	Spenser & Milton <i>Invert Morph</i> Chemistry 6 Adv Logic	Spenser & Milton <i>Invert Morph</i> Chemistry 6 Adv Logic	Physics 4 <i>Italian 2</i> <i>History 10</i> <i>Roman History</i> Shakespeare	Physics 4 <i>Italian 2</i> <i>History 10</i> <i>Roman History</i> Shakespeare
9		(Pol Econ)	<i>Hist of Phil</i>	<i>Hist of Phil</i>		
10	<i>Jur & Pol 2</i> <i>Art 2</i>	<i>Jur & Pol 2</i> <i>Art 2</i>	Med History <i>Bible 6</i>	Med History <i>Bible 6</i>	<i>Pol Econ</i> <i>French Lit</i>	<i>Pol Econ</i> <i>French Lit</i>
11	Geology 2 <i>Spanish 2</i> <i>Pr Physics</i> (Pol Econ)	Geology 2 <i>Spanish 2</i> <i>Pr Physics</i> (Pol Econ)	Seneca 10 Prac Bot 4 History 10 Chemistry 6	Seneca 10 Prac Bot 4 History 10 Chemistry 6	<i>Pol Econ</i>	<i>Pol Econ</i>
3	<i>Geometry</i> Vert Anat 6 <i>Old & Mid Eng</i> Phys Geog 2 ETHICS	[18] <i>Geometry</i> Vert Anat 6 <i>Old & Mid Eng</i> Phys Geog 2 ETHICS		Exp Psy (a p m) <i>Greek 12</i>	Exp Psy (a p m) <i>Greek 12</i>	
4				German <i>Diff Eq</i>	German <i>Diff Eq</i>	
5	(Pol Econ)	(Pol Econ)		Geology 4 <i>Anat Mech</i>	Geology 4 <i>Anat Mech</i>	

Required studies in SMALL CAPITALS. Electives in *Italics* open to Juniors and Seniors. Electives in Roman type open to Juniors only. Electives scheduled at same hour are mutually exclusive.

ACADEMIC SENIOR FIRST TERM SCHEDULE. —1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8		Osteology (Roman Law)	Aristotle Osteology Roman Law Hist Nat Phil History 13	[17] Physiology [16] Aristotle [16] Hist Nat Phil [19] History 13	Nervous Syst [Lab] Physics 11 Mod Pol Theories [2]	Nervous Syst [Lab] Physics 11 Mod Pol Theories [2]
9	Ad Gen Psych [Lab] <i>Roman Hist</i> <i>Jur & Pol</i> 1	Ad Gen Psych [Lab] Amer Lit [2] <i>Roman Hist</i>	<i>Hist of Phil</i> German 13 Architect 1	[8] <i>Hist of Phil</i> [1] German 13 [Art M] Architect 1		
10			Lab Chem 7 <i>1904 Gen Writ</i> Hist Draw [Art M]	Lab Chem 7 <i>1904 Gen Writ</i> Hist Draw [Art M]	Paleontology Latin 15 <i>French Lit</i> Internat Law [2]	Paleontology Latin 15 <i>French Lit</i> Internat Law [2]
11	<i>Art 1</i> Lucretius 13 Theism [Sem] Pract Physics [Lab] <i>Spanish</i> 1	<i>Art 1</i> Lucretius 13 Theism [Sem] Pract Physics [Lab] <i>Spanish</i> 1	<i>Hist 9</i> Adv Ex Pysc [Lab] Chemical Physics Geometry [18]	<i>Hist 9</i> Adv Ex Pysc [Lab] Chemical Physics Geometry [18]	Or Chem Pract Astron Amer Hist [8 25]	Or Chem Pract Astron Amer Hist [8 25]
3	<i>Old Engl</i> Old French Greek 13 <i>Solid Geom</i> Mamm Anat [Lab]	<i>Old Engl</i> Old French Greek 13 <i>Solid Geom</i> Mamm Anat [Lab]		2 p m Chem 9 Pol Econ 3 <i>Italian 1</i> Physiology [8 25]	2 p m Chem 9 Pol Econ 3 <i>Italian 1</i>	
4	Art 3 Astronomy 3	Art 3 Astronomy 3		Geology Art 9 Bible [Sem] Italian 3 <i>Iliad</i> <i>Diff Equations</i> [19]	Geology Art 9 Bible [Sem] Italian 3 <i>Iliad</i> <i>Diff Equations</i> [19]	
5	Th of Functions [10] Indust Hist [10] Spanish 3 Harmony [20]	Th of Functions [10] Indust Hist [10] Spanish 3 Harmony [20]	Chemistry 9 German 17 El of Epist [8]	Chemistry 9 German 17 El of Epist [8]	Chemistry 9 German 17 El of Epist [8]	

Electives in *Italics* open to Juniors and Seniors. Electives in Roman open to Seniors only. Electives scheduled at the same hour are mutually exclusive.

Roman Literature, Professor Carter: Tuesdays, 8—10 P. M.

WEEKLY SCHEDULES

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ACADEMIC SENIOR SECOND TERM SCHEDULE—1902-1903

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8	Embryology Gen Situation Th of Functions	Embryology Gen Situation Th of Functions	Hist Nat. Phil <i>Isverri Morpha</i> International Law Phys Geog 6	Hist Nat. Phil <i>Isverri Morpha</i> International Law Phys Geog 6	Roman History History 10 Physics 4 Italian 2 History 14 Or Chem 12 Jur & Pol 6 Her & Descent	Roman History History 10 Physics 4 Italian 2 History 14 Or Chem 12 Jur & Pol 6 Her & Descent
9	Geometry 16 Phys Geog 4 Interp of Lit Adv Gen Psych	Geometry 16 Phys Geog 4 Interp of Lit Adv Gen Psych	Hist Nat. Phil Engl Lit 14	Hist Nat. Phil Engl Lit 14	Roman History History 10 Physics 4 Italian 2 History 14 Or Chem 12 Jur & Pol 6 Her & Descent	Roman History History 10 Physics 4 Italian 2 History 14 Or Chem 12 Jur & Pol 6 Her & Descent
10	Jur & Pol 2 Arl 2 Old French	Jur & Pol 2 Arl 2 Old French	German 14 Bible Architecture Eng Lit 16	German 14 Bible Architecture Eng Lit 16	Paleontology Greek 16 History 18 French Lit	Paleontology Greek 16 History 18 French Lit
11	Phil of Rel Spanish 2 Phys 8 & 10 Cicero 14	Phil of Rel Spanish 2 Phys 8 & 10 Cicero 14	Adv Ex Psych History 10	Adv Ex Psych History 10	Roman Law Pract Astron Or Chem 14 Amer Hist Jur & Pol 8	Roman Law Pract Astron Or Chem 14 Amer Hist Jur & Pol 8
3	Solid Geom Old & Mid Engl Histology 12	Solid Geom Old & Mid Engl Histology 12	Pol Ec 4 German 16 Greek 12	Pol Ec 4 German 16 Greek 12	Pol Ec 4 German 16 Greek 12	Pol Ec 4 German 16 Greek 12
4	Latin 16 Art 4 Eng Com Law	Latin 16 Art 4 Eng Com Law	Art 10 Geology 6 Science & Rel Diff Eq	Art 10 Geology 6 Science & Rel Diff Eq	Art 10 Geology 6 Science & Rel Diff Eq	Art 10 Geology 6 Science & Rel Diff Eq
5	Sanskrit Metaphysics Phys Geog 8	Sanskrit Metaphysics Phys Geog 8	Pol Econ 8 Italian 4 Anal Mech Chemistry 10	Pol Econ 8 Italian 4 Anal Mech Chemistry 10	Pol Econ 8 Italian 4 Anal Mech Chemistry 10	Pol Econ 8 Italian 4 Anal Mech Chemistry 10

Electives in *Italics* open to Juniors and Seniors. [Electives in Roman open to Seniors only. Electives scheduled at the same hour are mutually exclusive.]
German 16, not given 1902-03. Virgil will be given Tuesday Evening. Greek Lyric Poets to be given at hour to be arranged.

JOHN C. GREEN SCHOOL OF SCIENCE

FACULTY

WOODROW WILSON, PH.D., LITT.D., LL.D., *President.*

CYRUS FOGG BRACKETT, M.D., LL.D., *Henry Professor of Physics.*

HENRY BEDINGER CORNWALL, E.M., PH.D., *Professor of Applied Chemistry and Mineralogy.*

GEORGE MACCLOSIE, LL.D., D.Sc., *Professor of Biology.*

CHARLES McMILLAN, A.M., C.E., *Professor of Civil Engineering and Applied Mathematics.*

CHARLES GREENE ROCKWOOD, JR., PH.D., *Clerk of the Faculty, Professor of Mathematics.*

FREDERICK NEWTON WILLSON, A.M., C.E., *Professor of Descriptive Geometry, Stereotomy, and Technical Drawing.*

LEROY WILEY MCCAY, D.Sc., *Professor of Chemistry.*

HERBERT STEARNS SQUIER SMITH, C.E., *Professor of Applied Mechanics.*

WALTER BUTLER HARRIS, C.E., *Professor of Geodesy.*

EDWIN SEELYE LEWIS, PH.D., *Professor of Romance Languages.*

ELMER HOWARD LOOMIS, PH.D., *Professor of Physics.*

EDGAR ODELL LOVETT, PH.D., *Professor of Mathematics.*

WALTER MEAD RANKIN, PH.D., *Professor of Invertebrate Zoology.*

CHARLES FREEMAN WILLIAMS MCCLURE, A.M., *Professor of Comparative Anatomy.*

THOMAS MARC PARROTT, PH.D., *Professor of English.*

ALEXANDER HAMILTON PHILLIPS, D.Sc., *Professor of Mineralogy.*
FRED NEHER, A.M., *Professor of Analytical and Organic Chemistry.*
WALTER AUGUSTUS WYCKOFF, A.M., *Assistant Professor of Political Economy.*
WILLIAM MAXWELL REED, *Assistant Professor of Astronomy.*
ROBERT McNUTT McELROY, Ph.D., *Assistant Professor of American History.*
HOWARD McCLENAHAN, E.E., M.S., *Assistant Professor of Physics.*

ADDITIONAL INSTRUCTORS

HERBERT FOWLER SILL, M.S., *Instructor in Analytical Chemistry.*
GEORGE MADISON PRIEST, A.M., *Instructor in German.*
WILLIAM HENRY McLAUCHLAN, Ph.D., *Assistant in General Chemistry.*
CHARLES ALEXANDER ROBINSON, Ph.D., *Instructor in Latin.*
WILLIAM FOSTER, JR., Ph.D., *Instructor in General Chemistry.*
PHILIP HUDSON CHURCHMAN, A.M., *Instructor in French.*
JOHN STOUT VAN NEST, M.S., *Instructor in Chemistry and Mineralogy.*
CHARLES FREDERICK SILVESTER, *Assistant in Anatomy.*
WILLIAM KOREN, A.M., *Instructor in Modern Languages.*
CHARLES SILAS SINCERBEAUX, A.B., *Instructor in Geodesy.*
AUGUSTUS WHITE LONG, A.M., *Instructor in English.*
TRUMAN STEPHEN WOODWARD, A.B., *Assistant in General Chemistry.*
FRANK LINLEY CRITCHLOW, Ph.D., *Instructor in French.*
OLIVER DIMON KELLOGG, Ph.D., *Instructor in Mathematics.*
PHILIP ELY ROBINSON, Ph.D., *Instructor in Physics.*
EDWIN PLIMPTON ADAMS, M.S., *Instructor in Physics.*
GEORGE PARIS, B.S., *Instructor in Civil Engineering.*
EDWARD CHARLES McWILLIAMS, B.S., *Instructor in Graphics.*
DANIEL LINDSEY THOMAS, A.M., *Instructor in English.*

TERMS OF ADMISSION

ENTRANCE EXAMINATIONS

All candidates for examination in Princeton must report at the Faculty Room in the University Offices the evening before the examination begins or on their arrival the following morning. The first examination for admission will begin in Princeton, on Thursday, June 16th, 1904, at 9 A. M., and will continue through the forenoon of Saturday. The second will begin on Monday, September 19th, 1904, at 2 P. M. Applicants who have conditions or other deficiencies from the June examinations are expected to remove them at the September examinations. *Attendance is required at the beginning of the examinations.*

Simultaneously with the June entrance examinations in Princeton, examinations are held in the cities of New York, Philadelphia, Pittsburg, Albany, Buffalo, Chicago, Cincinnati, Cleveland, Columbus, Denver, Harrisburg, Indianapolis, Kansas City, Louisville, Newark, Omaha, Portland, Ore., St. Louis, St. Paul, San Antonio, Scranton, Syracuse, Washington, Wilkes-Barre, and at such preparatory schools and other cities as the number of candidates or the distance from other places of examination may justify. The places in which the examinations are to be held can be learned by application to the Registrar.

Examinations at other times and places than those specified are very inconvenient and often impracticable, and ap-

plicants for examination on other than the regular days must obtain previous permission by writing to the Registrar, and are required to pay \$10 into the treasury.

All candidates for admission must bring satisfactory testimonials of good moral character, preferably from their last instructors, and if the candidate has been a member of another college, university or similar institution, he must produce a certificate from its president or faculty that he is free from censure in the same.

Each applicant for admission should be provided with a statement, signed by his teacher, as to his fitness to be examined in each of the subjects specified in the following list which he offers. This statement is merely for the information of the examiners, and is in no sense an admission certificate.

Candidates for admission to the Freshman class must be at least sixteen years of age.

No candidate is admitted into the Undergraduate Department without an examination and a vote of the Faculty.

PRELIMINARY EXAMINATIONS

At the examinations in June and September, candidates intending to enter the Freshman class one year later are admitted to examination in a portion of the subjects required for entrance. Certificates as to preparation in the subjects in which the candidate wishes to be examined should be presented.

FRESHMAN ENTRANCE REQUIREMENTS

It is recommended that candidates be prepared for examination on the requirements as specified, but equivalents will be accepted.

ENTRANCE REQUIREMENTS FOR THE COURSE LEADING TO
THE DEGREE OF BACHELOR OF SCIENCE, TO GO INTO
EFFECT IN 1904-1905.

The following entrance requirements comprise two classes of subjects; (I) Subjects required of all candidates for admission to the Freshman class; (II) Subjects from among which each candidate must choose a certain number for presentation along with the required subjects. The regulations governing the choice of elective entrance subjects are given below.

The requirements are defined for the most part in close accordance with recommendations of the National Educational Association and of the College Entrance Examination Board.

I. SUBJECTS PRESCRIBED FOR ALL CANDIDATES

ENGLISH

1. *English.* The examination will be based upon the books prescribed by the uniform entrance requirements in English. Questions as to the subject matter, structure, and style of these books will be asked. Candidates must be prepared in all of the books required for the year of entrance.

For 1904, 1905, 1906 the books prescribed are:

a. For reading, *Shakespeare's* The Merchant of Venice and Macbeth; The Sir Roger de Coverley Papers in The Spectator, *Coleridge's* The Ancient Mariner, *Scott's* Ivanhoe and Lady of the Lake, *Tennyson's* Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur, *Lowell's* The Vision of Sir Launfal, *George Eliot's* Silas Marner, *Irving's* Life of Goldsmith.

b. For careful study, *Shakespeare's* Julius Cæsar, *Milton's* Lycidas, Comus, L'Allegro, and Il Penseroso, *Burke's* Speech on Conciliation with America, *Macaulay's* Life of Samuel Johnson, and Addison.

MATHEMATICS

In all numerical work special emphasis is laid upon accuracy and facility in reckoning. Problems having to do with lengths, areas or volumes, will be stated, usually, in terms of the metric system of weights and measures.

2. *Algebra to Quadratics. A I.* The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

3. *Elementary Algebra, Quadratics and beyond. A II.* Quadratic equations, equations in one or more unknown quantities, that can be solved by the methods of quadratic equations, ratio and proportion, the progressions, the elementary treatment of permutations and combinations, the binomial theorem for positive integral exponents, and the use of four, five, and six place logarithms.

4. *Plane Geometry.* Demonstrations of theorems, and constructions and demonstrations of problems; the solution of simple numerical exercises, including lengths of lines and areas of the triangle, parallelogram, trapezoid, regular polygons and circle; simple original exercises in construction and demonstration.

LATIN

5. *Latin Grammar.* The inflections; the simpler rules for composition and derivation of words; syntax of cases and verbs; structure of the sentence in general, with particular regard to relative and conditional sentences, indirect discourse and the subjunctive; so much prosody as relates to accent, versification in general, and dactylic hexameter.

6. *Latin Composition A.* Translation into Latin of detached sentences and very easy continuous prose, based upon Cæsar and Cicero.

7. *Cæsar.* Any four books of the Gallic War, preferably the first four.

8. *Cicero A.* Any six orations from the following list, but preferably the first six mentioned:

The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the fourteenth Philippic.

9. *Virgil A.* The first six books of the *Æneid*.

II. ELECTIVE SUBJECTS

FRENCH

10. *French A.* Candidates should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar.

Satisfactory preparation for this examination is furnished in the two-year course in elementary French recommended by the Modern Language Association. The course comprises drill in pronunciation, the rudiments of grammar, memorizing easy sentences, with easy exercises illustrating grammatical forms and principles, translation into French, writing French from dictation, and the reading of 100 to 175 pages of graduated texts with abstracts of this reading, followed by 250 to 400 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches, such as: *About's* *Le roi des montagnes*, *Bruno's* *Le tour de la France*, *Daudet's* *easy short tales*, *La Bédollière's* *La Mère Michel et son chat*, *Erckmann-Chatrian's* *stories*, *Foa's* *Contes biographiques* and *Le petit Robinson de Paris*, *Foncin's* *Le*

pays de France, *Labiche and Martin's* La poudre aux yeux and Le voyage de M. Perrichon, *Lagouvé and Labiche's* La cigale chez les fourmis, *Malot's* Sans famille, *Mairet's* La tâche du petit Pierre, *Mérimée's* Colomba, extracts from *Michelet, Sarcey's* Le siège de Paris, *Verne's* stories.

Every candidate must offer either 10 or 12.

11. French B. Candidates should be able to read at sight ordinary French prose or simple poetry, to translate into French a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course. Preparation for this examination should include, in addition to the elementary course, 400 to 600 pages of moderately difficult French, a portion of it to be in the dramatic form; exercise in giving French paraphrases, and continued practice in grammar and composition.

Suitable texts are: *About's* stories, *Augier and Sandeau's* Le gendre de M. Poirier, *Béranger's* poems, *Corneille's* Le Cid and Horace, *Copée's* poems, *Daudet's* La Belle-Nivernaise, *La Brète's* Mon oncle et mon curé, *Madame de Sévigné's* letters, *Hugo's* Hernani and La chute, *Labiche's* plays, *Loti's* Pêcheur d'Islande, *Mignet's* historical writings, *Molière's* L'avare and Le bourgeois gentilhomme, *Racine's* Athalie, Andromaque, and Esther, *George Sand's* plays and stories, *Sandeau's* Mademoiselle de la Seiglière, *Scribe's* plays, *Thierry's* Récits des temps Mérovingiens, *Thiers' L'expédition de Bonaparte en Égypte*, *Vigny's* La canne de jonc, *Voltaire's* historical writings.

GERMAN

12. German A. Candidates should be able to read at sight, and to translate a passage of very easy dialogue or narrative prose, help being given upon unusual words and constructions, to put into German short English sentences

taken from the language of everyday life or based upon the text given for translation, and to answer questions upon the rudiments of the grammar.

Satisfactory preparation for this examination is furnished in the two-year course in elementary German recommended by the Modern Language Association. The course comprises drill in pronunciation, memorizing easy sentences, the rudiments of grammar with easy exercises illustrating grammatical forms and principles, and the reading of 75 to 100 pages of graduated texts from a reader, followed by 150 to 200 pages of easy stories and plays.

Stories suitable for the elementary course may be selected from the following list: *Andersen's* Märchen and Bilderbuch ohne Bilder, *Arnold's* Fritz auf Ferien, *Baumbach's* Die Nonna and Der Schwiegersohn, *Gerstcker's* Germelshausen, *Heyse's* L'Arrabbiata, Das Mdchen von Treppi, and Anfang und Ende, *Hillern's* Hher als die Kirche, *Jensen's* Die braune Erica, *Leander's* Trumereien and Kleine Geschichten, *Seidel's* Mrchen, *Sthl's* Unter dem Christbaum, *Storm's* Imensee and Geschichten aus der Tonne, *Zschokke's* Der zerbrochene Krug.

Suitable plays are: *Benedix's* Der Prozess, Der Weiberfeind, and Gnstige Vorzeichen, *Els's* Er ist nicht eiferschtig, *Wichert's* An der Majorsecke, *Wilhelmi's* Einer muss heiraten. It is recommended, however, that not more than one of these plays be read.

Every candidate must offer either 10 or 12.

13. *German B.* Candidates should be able to read at sight German prose of ordinary difficulty, whether recent or classical; to put into German a connected passage of simple English, paraphrased from a given text in German; to answer any grammatical questions relating to usual forms and essential principles of the language, including syntax and word-formation, and to translate and explain a passage of classical literature taken from some text previously studied.

Preparation for this examination should include, in addition to the elementary course, about 400 pages of moderately difficult prose and poetry, with continued practice in grammar and composition. Suitable reading matter can be selected from such books as: *Ebner-Eschenbach's* Die Freiherrn von Gemperlein, *Freitag's* Die Journalisten and Bilder aus der deutschen Vergangenheit—for example, Karl der Grosse, Aus den Kreuzzügen, Doktor Luther, Aus dem Staat Friedrichs des Grossen, *Fouqué's* Undine, *Gerstäcker's* Irrfahrten, *Goethe's* Hermann und Dorothea and Iphigenie, *Heine's* poems and Reisebilder, *Hoffmann's* Historische Erzählungen, *Lessing's* Minna von Barnhelm, *Meyer's* Gustav Adolf's Page, *Moser's* Der Bibliothekar, *Riehl's* Novellen—for example, Burg Neideck, Der Fluch der Schönheit, Der Stumme Ratsherr, Das Spielmannkind, *Rosegger's* Waldheimat, *Schiller's* Der Neffe als Onkel, Der Geisterseher, Wilhelm Tell, Die Jungfrau von Orleans, Das Lied von der Glocke, Balladen, *Scheffel's* Der Trompeter von Säckingen, *Uhland's* poems, *Wildenbruch's* Das edle Blut.

SPANISH

14. *Spanish A.* The examination will consist of the reading at sight of easy Spanish prose, of the translation into Spanish of simple English sentences, and of questions on the irregular verbs and on the rudiments of grammar, including the elementary rules of syntax. From 400 to 600 pages of Spanish prose should have been read. Preparation for this examination is most satisfactorily made by adapting to the instruction in Spanish the recommendations offered by the Modern Language Association of America for the Elementary Course in French.

AMERICAN AND ENGLISH HISTORY

It is recommended that each of the following courses be pursued in the spirit and by the methods suggested in the

Report of the Committee of Seven of the American Historical Association on the Study of History in Schools. (The Macmillan Co. 1899.)

15. *American History and Civil Government.* The course of study recommended for American History and Civil Government should occupy four exercises a week for one year. Military details may be neglected. The origins of the American people and the development of their political life should be clearly understood in their main outlines.

16. *English History.* A mere outline of English history previous to the Norman invasion will suffice. The course of English history after that event down to 1850 should be carefully reviewed with proper reference to the development of political institutions.

No candidate may offer both 15 and 16.

ADVANCED MATHEMATICS

17. *a. Solid Geometry.* Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, parallelepipeds, pyramids and the regular solids, of cylinders, cones, and spheres, of spherical triangles; and the mensuration of these solids and their surfaces.

b. Plane Trigonometry. Definitions of the six trigonometric functions as ratios, relations between these six functions, values of the functions for 0° , 30° , 45° , 60° , 90° , 120° , 135° , etc., etc., formulas for the sine, cosine, and tangent of the sum or difference of two angles for all angles, formulas for the sum or difference of two sines or two cosines, expressions for the functions of double and half angles, trigonometric identities and equations, theory of logarithms and the use of trigonometric tables, and the solution of right and oblique plane triangles. A knowledge

of the meaning of the circular measure of angles, and of the inverse trigonometric functions is also desirable.

a and b together constitute but one elective.

SCIENCE

18. Chemistry.

A. Requirements for candidates who have had laboratory as well as class-room work.

The requirements are those specified in the Plan of Organization of the College Entrance Examination Board for the Middle States and Maryland.

The following outline includes only the indispensable things which must be studied in the class-room and laboratory. The material is, for the most part, common to all elementary text-books and laboratory manuals. Each book makes its own selection of facts beyond this, which may be necessary for the illustration of the principles of the science. The order of presentation will naturally be determined by each teacher for himself.

OUTLINE—The chief physical and chemical characteristics, the preparation and the recognition of the following elements and their chief compounds: *oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur*, phosphorus, silicon, potassium, *sodium*, calcium, magnesium, *zinc*, copper, mercury, silver, aluminum, *lead*, tin, *iron*, manganese, chromium.

More detailed study should be confined to the italicized ELEMENTS (as such) and to a restricted list of compounds, such as: water, hydrochloric acid, carbon-monoxide, carbon-dioxide, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen-sulphide, sodium-hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flames, acids, bases, salts, oxidation and reduction, crystallization, manufacturing processes, familiar substances (illuminating gas,

explosives, baking powder, mortar, glass, metallurgy, steel, common alloys, porcelain, soap).

Combining proportions by weight and volume; calculations founded on these and Boyle's and Charles's laws; symbols and nomenclature (with careful avoidance of special stress, since these are non-essential); atomic theory, atomic weights and valency in a very elementary way; nascent state; natural grouping of the elements; solution (solvents and solubility of gases, liquids and solids, saturation); ionization; mass action and equilibrium; strength (=activity) of acids and bases; conservation and dissipation of energy; chemical energy (very elementary); electrolysis. Chemical terms should be defined and explained, and the pupil should be able to illustrate and apply the ideas they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts.

The facts should be given as examples for various classes, and not as isolated things. Thus, to speak of a "standard method of preparing hydrogen," whereby the action of zinc on hydrochloric acid is meant, shows narrow and infertile teaching. It should be shown that all acids are acted upon by a certain class of metals to produce hydrogen. Examples of both classes of metals should be given and the general principles derived. The reason for using zinc and hydrochloric acid in the laboratory can then be stated.

It is recommended that the candidate's preparation in chemistry should include:

- a. Individual laboratory work, comprising at least forty exercises selected from a list of sixty or more, not very different from the list given below.
- b. Instruction by lecture-table demonstrations, to be used mainly as a basis for questioning upon the general principles involved in the pupil's laboratory investigations.

- c. The study of at least one standard text-book, to the end that the pupil may gain a comprehensive and connected view of the most important facts and laws of elementary chemistry.

List of Experiments

General

1. Composition of the atmosphere.
2. Dissociation of mercuric oxide, and study of resulting products.
3. Burning of magnesium, sodium and potassium in air, and of iron in oxygen, with study of resulting products.
4. Combination of substances produced in (3) with water, and study of results.
5. Burning of sulphur and phosphorus in air; study of products.
6. Combination of substances produced in (5) with water; study of products.
7. Treatment of substances resulting from (3) and (4) with hydrochloric acid, and examination of final products.

Laws of Gas Volumes and Vapor Tension

8. Boyle's Law.
9. Charles's Law.
10. Vapor tension as related to temperature.

Common Elements and Compounds

11. Preparation and study of oxygen.
12. Weight of a litre of oxygen under standard conditions.
13. Preparation of hydrogen by action of sodium on water. Careful study of by-product.
14. Preparation of hydrogen by zinc and acid. More thorough study of hydrogen in larger quantities. Study of by-product.
15. Weight of a litre of hydrogen under standard conditions. (Optional for best students only.)

16. Proportion by volume in which hydrogen and oxygen unite. (Lecture demonstration with eudiometer.)

17. Proportion by weight in which hydrogen and oxygen combine.

18. Study of boiling point, freezing point, action on litmus, and taste of substance produced by combining oxygen and hydrogen.

19. Electrolysis of water, resulting gases being accurately measured and tested.

20. Vapor density of water, conclusion as to formula for water. (Optional for best pupils.)

21. Study of sodium, potassium, lithium, strontium, calcium, and barium compounds. Detection of presence of these metals by flame test and by spectroscope.

22. Study of salts of cobalt, copper, nickel, manganese, chromium, iron. Tests for these metals and those mentioned in 21 in unknown mixtures.

23. Study of compounds of aluminum, magnesium, and zinc. Tests for these in mixtures of 21 and 22.

24. Tests for silver, lead, and bismuth in unknown mixtures of 21, 22 and 23.

25. Tests for mercury and arsenic in unknown mixtures of 21, 22, 23 and 24.

26. Preparation and study of chlorine gas.

27. Weight of a litre of chlorine.

28. Combustion of chlorine in hydrogen.

29. Preparation of hydrochloric acid and study of properties.

30. Decomposition of hydrochloric acid gas by sodium amalgam, and conclusions as to percentage composition. Avogadro's law.

31. Preparation and study of at least three chlorides.

32. Preparation and study of bromine.

33. Preparation of at least three bromides.

34. Preparation and study of iodine.

35. Preparation of at least three iodides.
36. Comparative study of the chemism of chlorine, bromine and iodine by mutual displacement.
37. Study of hydrofluoric acid and fluorides.
38. Determining of the combining proportion of chlorine and zinc, and of the atomic weight of zinc.
39. Atomic weight of zinc from specific heat. Law of Dulong and Petit.
40. Atomic weight of silver by displacement of zinc.
41. Study of forms of sulphur.
42. Direct formation of sulphides.
43. Study of sulphurous oxide.
44. Preparation of sulphurous and sulphuric acids.
45. Preparation of at least two sulphites and two corresponding sulphates. Comparative study of these.
46. Decomposition of ammonium nitrate and study of nitrous oxide.
47. To determine the composition of nitrous oxide. Gay-Lussac's law.
48. Preparation and study of nitric acid.
49. Preparation of three nitrates in three different ways.
50. Composition of gas formed by action of cold dilute nitric acid on copper.
51. Composition of gas formed by union of nitric oxide and oxygen.
52. Preparation of chromic anhydride, chromic acid and potassium chromate.
53. Changing potassium chromate to potassium bichromate and back again. Oxidation and reduction in solutions.
54. Chromium as an acid-forming and as a base-forming element. Preparation of chromium sulphate.
55. Preparation of ferrous and ferric salts.

Carbon and some Carbon Compounds

56. Product of burning charcoal. Tests.
57. Test for presence of carbon in wood, paper, kerosene, coal gas, alcohol.
58. Preparation of three carbonates.
59. Solubility of carbonates in the presence of carbon di-oxide.
60. Effect of heat on suspension of carbonates in solution.
61. Carbon di-oxide from fermentation.
62. Alcohol from fermentation.
63. Preparation of ether by alcohol and sulphuric acid.
64. Preparation of alkaline salts of fatty acids, or soap-making.

At the time of the examination the candidate must present a note-book in which he has recorded the steps and the results of his laboratory exercises, and this note-book must bear the endorsement of his teacher, certifying that the notes are a true record of the pupil's work. It should contain an index of the exercises which it describes. It is practicable for pupils to make the original record of their observations entirely presentable, so that copying will be unnecessary, and they should in general be required to do so. This note-book will be returned at any time within a year at the request of the candidate.

B. Requirements for candidates who have had class-room work only.

The candidates will be examined on *Remsen's* Introduction to the Study of Chemistry. A mere study of this book under the direction of a tutor will not be regarded as a fulfilment of the requirement. The school instructor must perform all experiments before his class and require his pupils to take notes, sketch apparatus and attain a fair amount of proficiency in expressing chemical changes in the form of equations. Teachers will bear in mind that candi-

dates must be well posted in matters relating to bases, acids and salts and thoroughly drilled in making simple stoichiometrical calculations. Although a knowledge of the chemistry of the non-metals is regarded as most important, it is imperative that candidates should also possess a fair amount of information concerning the more common, useful and precious metals and their compounds.

19. *Physics.* The requirement in Elementary Physics may be met in either of the two following ways :

A. By passing an examination on the subject as it is presented in such text-books as *Gage's Principles of Physics*. In this examination much emphasis will be laid upon the student's ability to solve numerical problems.

B. By presenting a laboratory note-book containing full records of all the experimental work performed by the student during his course of preparation. This note-book must bear the certificate of the instructor that the records were made by the student himself, and that they are a faithful description of the laboratory work actually done by him. The note-book should be paged and properly indexed. The presentation of this note-book will excuse the student from the examination on the general subject, but he will still be examined on the solution of numerical problems as prescribed in A. The metric system will be used exclusively in the examination.

In order to meet requirement A at least one school year, with four or five recitations per week, should be devoted to the subject. This course should be accompanied by class-room demonstrations conducted by the teacher. Requirement B may be met in the same length of time by dividing the time about equally between recitations based on a suitable text-book, and laboratory exercises performed by the student himself. While it is desirable that this laboratory work have a large range and accordingly be mainly of a qualitative character, still due stress should be laid upon the performance of exact quantitative work.

REGULATIONS GOVERNING THE NUMBER AND THE CHOICE
OF ELECTIVE FRESHMAN ENTRANCE SUBJECTS
IN 1904

In 1904, candidates for admission to the Freshman class will be required to present, in addition to subjects 1-9, some one of the following combinations of elective subjects:

(a) *French A* (10) or *German A* (12) with any *one* other of subjects 10, 12, 14;

(b) *French A* (10) or *German A* (12) with any *two* of subjects 15, (16), 17, 18 (*A* or *B*), 19 (*A* or *B*), the brackets indicating an exclusion;

(c) *French B* (11) or *German B* (13) with any *one* of subjects 15, 16, 17, 18 (*A* or *B*), 19 (*A* or *B*).

IN 1905—AND THEREAFTER

Beginning in 1905 candidates for admission to the Freshman class must present, in addition to subjects 1-9, some one of the following fifty-one admissible combinations of elective subjects:

(a) *French A* (10) or *German A* (12) with any *one* other of subjects 10, 12, 14, and any *one* of subjects 15, 16, 17, 18 (*A* or *B*), 19 (*A* or *B*);

(b) *French A* (10) or *German A* (12) with any *three* of subjects 15, (16), 17, 18 (*A* or *B*), 19 (*A* or *B*), the brackets indicating an exclusion;

(c) *French B* (11) with 12 or 14.

(d) *German B* (13) with 10 or 14.

(e) *French B* (11) or *German B* (13) with any *two* of subjects 15, (16), 17, 18 (*A* or *B*), 19 (*A* or *B*), the brackets indicating an exclusion.

ENTRANCE REQUIREMENTS FOR THE COURSE LEADING TO THE DEGREE OF CIVIL ENGINEER

The detailed requirements for each subject are the same as in the requirements for the course leading to the degree of Bachelor of Science, and will be found under the same numbers on the pages immediately preceding.

ENGLISH

1. *English.*

MATHEMATICS

2. *Algebra to Quadratics. A I.*
3. *Elementary Algebra, Quadratics and beyond. A II.*
4. *Plane Geometry. 17 (a). Solid Geometry.*
- 17 *b. Plane Trigonometry.* Required in June, 1904, and thereafter.

ONE OF THE THREE LANGUAGES

- | | | |
|----------|--------------------------|------------------------------|
| LATIN.— | 5. <i>Latin Grammar.</i> | 6. <i>Latin Composition.</i> |
| | 7. <i>Cæsar.</i> | 8. <i>Cicero A.</i> |
| FRENCH.— | | 10. <i>French A.</i> |
| GERMAN.— | | 12. <i>German A.</i> |

ONE OF THE TWO SCIENCES

- | | |
|------------|-----------------------|
| CHEMISTRY. | 18. <i>Chemistry.</i> |
| PHYSICS. | 19. <i>Physics.</i> |

It is recommended that all candidates should receive instruction in free-hand drawing before their entrance.

EXAMINATION CERTIFICATES ISSUED BY THE COLLEGE ENTRANCE EXAMINATION BOARD

will be accepted for admission to either the Bachelor of Science or the Civil Engineering course in place of the regular entrance examinations, in so far as the certificates presented correspond to the requirements of this University.

Candidates offering such certificates are required to submit therewith the testimonials as to character and general fitness prescribed above for other candidates. The latter testimonial shall state definitely the amount of work done in each subject offered for examination.

ADMISSION TO ADVANCED STANDING

Candidates for admission to an advanced class will be examined in the studies previously pursued by the class they propose to enter, and may also be required to pass the regular examinations for admission to the Freshman class. While a certificate of satisfactory work done in any of these studies in another institution will not necessarily excuse from examination, it may in some degree modify the examination, and should therefore always be presented. Examinations for advanced standing are held only in Princeton.

No person is admitted to the University as a candidate for the degree of Bachelor of Science or Civil Engineer after the beginning of the first term of Senior year.

ADMISSION TO SPECIAL COURSES

Admission to special courses and the regulation of work therein are determined in the same way as for special courses in the Academic Department.

REGULATION CONCERNING SECRET SOCIETIES

Immediately after the beginning of the Academic year, the students entering the Undergraduate Department meet according to announcement for matriculation and subscription to the following pledge, required by the Board of Trustees:

We, the undersigned, do individually for ourselves promise, without any mental reservation, that we will have no connection whatever with any secret society, nor be present at the meetings of any secret society in this or any other institution so long as we are members of Princeton University ; it

being understood that this promise has no reference to the American Whig and Cllosophic Societies. We also declare that we regard ourselves bound to keep this promise and on no account whatever to violate it.

EXAMINATIONS, STANDING, AND GRADUATION

EXAMINATIONS

The regulations concerning examinations, conditions and the removal of conditions are the same as those for the students of the Academic Department, excepting that the regulations concerning conditions at the end of the Senior year and concerning thesis requirements are given below under the heading "Graduation."

STANDING

The standing of each student is decided by the method which is used in the Academic Department, as given under the heading "Standing," but in technical studies the question of any students passing shall be determined by the professors in the department concerned.

GRADUATION

Each candidate for a degree is required to prepare and submit for the approval of an instructor, appointed by the Faculty for the purpose, a graduation thesis. This shall be a design or review of some structure or process, or an examination of some work or subject selected from some study specially connected with the Scientific Department. The subject selected for the graduation thesis must be reported to the Faculty by the candidates for the degree of C. E. on or before the first Monday of October, and by the candidates for the degree of B.S. on or before the second Mon-

day of January (January 11, 1904), of their Senior year. The graduation thesis must be finished by the second Saturday (June 4, 1904) before Commencement.

Students who have fulfilled the requirements of their undergraduate courses, passing satisfactory examinations in all their studies and presenting acceptable graduation theses, are ordinarily recommended by the Faculty for the degree attached to the course they have pursued, and, if the recommendation is approved by the Trustees, the degree is conferred at Commencement and they receive diplomas signed by the President and the Clerk of the Board of Trustees.

A Senior who fails to pass in not more than two subjects of the second term examinations is allowed *one* re-examination and, if successful, may be recommended to receive his degree with his class. Further opportunity to remove conditions is given only in the next Academic year.

UNDERGRADUATE COURSES OF INSTRUCTION

Undergraduate courses are provided for the degrees of Bachelor of Science and Civil Engineer.

The undergraduate courses offer, according to the choice of the student, efficient education in the natural sciences in general, or a thorough training in the study of civil engineering and in various other branches of science, pure and applied. At the same time a liberal education in certain academic studies is secured to all candidates for a degree.

Instruction is given by lectures and recitations—by practice in the laboratories, drawing-rooms, museums and field—and excursions are made to different points of interest.

The courses for all candidates for the degree of Bachelor of Science are the same during Freshman and Sophomore

years, some studies in each year being elective. At the end of the Sophomore year each student makes his election between the course in General Science and the course in Chemistry, and he cannot afterward change his course without the permission of the Faculty.

Candidates for the degree of Civil Engineer pursue some studies in common with candidates for the degree of Bachelor of Science, but the divergence of the two courses commences at the very beginning.

Optional Courses.—The optional courses which are offered to the students of the Academic Department, as given in the Statement of Courses, are also open to those students of the School of Science who may be fitted to pursue them with profit.

The following symbols are used to indicate the different courses:

- a*, all courses leading to the degree of Bachelor of Science.
- g*, the course in General Science.
- c*, the course in Chemistry.
- e*, the course in Civil Engineering.

DEPARTMENT OF SCIENCE

COURSE IN GENERAL SCIENCE (*a*, *g*)

This is intended to afford instruction in science without necessarily specializing in any one department. During the Junior and Senior years the studies are largely elective. The choice of these elective studies is governed by the same rules as are in force in the Academic Department and in the regulations concerning registration, given on a later page under "General Orders." These electives include many of those given in the Academic Department and offer a wide variety of choice.

The separation between the course in General Science and the course in Chemistry takes place at the end of Soph-

omore year. A proper selection of electives in mathematics, mechanics, and graphics furnishes a suitable preparation for the graduate course in electrical engineering. Students who contemplate entering the medical profession may combine the electives in biology and chemistry so as to receive when graduating a special certificate recommending them to advanced standing in medical colleges.

A synopsis of the required and elective studies of the course will be found on a later page.

COURSE IN CHEMISTRY (*a, c*)

This course is designed to afford instruction in analytical and technical chemistry, and students electing it should take applied chemistry and mineralogy as electives in Sophomore year. They enter upon the special studies of the course at the beginning of Junior year.

The synopsis of the course is given on a later page.

DEPARTMENT OF CIVIL ENGINEERING (*e*)

The course in Civil Engineering is designed to fit its graduates for entering the profession of civil engineering. The degree conferred at its close on successful candidates is Civil Engineer (C. E.) The regular course of study occupies four years; but applicants who are found to be suitably prepared are admitted to advanced standing. Bachelors of Arts who have pursued elective courses in mathematics and Bachelors of Science can ordinarily be prepared for the degree of C. E. by a two-years course in the technical studies required for that degree. But by a judicious selection of elective studies, a candidate for the degree of B. S. in the course of General Science can materially shorten the time which he will need for such preparation after receiving the bachelor's degree.

Besides the studies taken in common with the candidates for the degree of Bachelor of Science the technical work in-

cludes the following subjects, for which a thorough preliminary training in mathematics is necessary.

RATIONAL AND APPLIED MECHANICS AND THEORY OF MACHINES is made to cover a wide field of study, beginning with the general discussions of motion and the action of forces, and ending with the deduction of practical formulas relating to the elasticity and strength of materials, the stability of different structures, the power, efficiency, and strength of hydraulic, steam, and air motors, and to the various problems which arise in the practice of hydraulic engineering. In dealing with these subjects, rigidly mathematical treatment is generally used, and higher analysis is freely employed wherever it is expedient; yet proper weight is given to methods of graphic analysis, and the student's attention is especially directed to those problems in which such methods are employed with marked advantage.

EXPERIMENTAL MECHANICS aims to familiarize the student with the physical properties of building materials; to teach him by actual experiment how to conduct tests and to deduce therefrom coefficients of strength, elasticity, etc., to determine coefficients of hydraulic flow and resistance, to gauge by the aid of indicators and dynamometers the power of steam and other motors. Under this head come also problems in the erection of structures.

THE PLANNING AND CONSTRUCTION OF ENGINEERING WORKS is treated in lectures. Great stress is laid on the application of correct principles and formulas, on the careful inspection, manipulation and preservation of materials, and on the economic features of various designs, and modes of executing them.

An important feature of this part of the course consists of excursions for the examination of rolling mills, bridge works, machine shops, water works, etc. In these visits the class is accompanied by one of the professors in charge and

For other elective courses in history open to students of the School of Science, see Exhibit of Studies.

POLITICAL ECONOMY AND SOCIOLOGY

PROFESSOR WYCKOFF AND DR. HALL

2. Political Economy. The Elements of Economics. Junior, *a*, required; second term [3]. Lectures, recitations, and written recitations. Dr. Hall.

For elective and seminary courses in political economy and sociology open to Seniors of the School of Science, see Exhibit of Studies.

LATIN

DR. ROBINSON

1. Livy: Books I, XXI, and XXII. Latin Prose Syntax. Freshman, *a*, elective; first term [3]. *Westcott*: Livy.
2. Tacitus: Germania and Agricola. Cicero: Selected Letters. Roman History. Freshman, *a*, elective; second term [3].
3. Plautus and Terence: reading of selected plays. Sophomore, *a*, elective; first term [3].
4. Horace: Odes, Satires, and Epistles. Catullus: Selections. Sophomore, *a*, elective; second term [3]. *Bennett*: Odes and Epodes; *Rolfe*: Satires and Epistles; *Simpson*: Catullus.
- 5 I. Pliny the Younger; Selected Letters. Junior and Senior, *a*, elective; first term [2], alternating with 5 II. *Westcott*: Pliny. Given 1904-1905.
- 5 II. Tacitus: Histories. Junior and Senior, *a*, elective; first term [2], alternating with 5 I. *Godley*: Tacitus. Given 1903-1904.
- 6 I. Suetonius; Lives of Julius and Augustus. Junior and Senior, *a*, elective; second term [2], alternating with 6 II. Given 1904-1905.

- 6 II. Juvenal's Satires and Martial's Epigrams. Selected readings. Junior and Senior, *a*, elective; second term [2], alternating with 6 I. *Wright*: Juvenal; *Westcott*: Martial. Given 1903-1904.

ENGLISH

PROFESSOR PARROTT, MR. LONG AND MR. THOMAS

1. Principles of English Composition and Rhetoric. Oral and written recitations from a text-book and occasional lectures; themes of 100 words once a week; fortnightly practice in extempore theme-writing; monthly themes of 400-600 words; assigned readings in English literature. Mr. Long. Freshman *a*, *e*, required; first term [3].
2. Advanced study of English Composition, including narration and argumentation. Text-book with oral and written recitations and occasional lectures; themes of 100 words once a week; exercises in extempore theme-writing; monthly themes 400-800 words; assigned readings in English literature. Mr. Long. Freshman *a*, *e*, required; second term [3].
3. Outline sketch of English Literature, from the beginning to the rise of the Romantic Movement. Oral and written recitations from a text-book, occasional lectures, themes based upon the lectures, and required reading. A considerable amount of collateral reading will be required and a larger amount will be recommended. Professor Parrott. Sophomore, *a*, required; first term [3].
4. Modern English Literature from the rise of the Romantic Movement to the death of Tennyson. Oral and written recitations from a text-book, occasional lectures, themes based upon the lectures and required reading, one longer essay upon a subject chosen in conference

with the Instructor. A considerable amount of collateral reading will be required and a larger amount will be recommended. Professor Parrott, Sophomore, *a*, elective; second term [3].

5. Shakespeare's Life and Work. A few typical plays will be read in the class and a large number assigned for outside study. Special attention will be paid to the development of Shakespeare's mind and art. A thesis on some subject connected with the term's work will be required at its close. Professor Parrott. Junior, *a*, elective; first term [2].
6. Hamlet. A special course in the extensive study of a single play, with reference to the text, the characters, and the dramatic problems. This course is open only to those who have elected course 5. Professor Parrott. Junior, *a*, elective; second term [2].

For other elective courses in English, open to students of the School of Science, see Exhibit of Studies.

GERMAN

MR. PRIEST AND MR. BEAM

- 1, 2. Beginners' Course in the Elements of Grammar and reading of easy texts. Freshman, *a*, elective, open to students who have not offered German on entrance; both terms [3]. Mr. Beam. *Whitney*: Compendious German Grammar; *Whitney*: Introductory German Reader; *Zschokke*: Der zerbrochene Krug; *Baumbach*: Der Schwiegersohn. This course (when once elected) requires an attendance of two successive years.
- 3, 4. Intermediate Course in Grammar, Composition and Reading. Freshman, *a*, elective, open to students who have passed German A of the entrance requirements; both terms [3]. Mr. Beam. *Whitney*: Compendious German Grammar; *v. Jagemann*: German Com-

- position; *Riehl*: Der stumme Ratsherr; *Moser*: Der Bibliothekar; *Freytag*: Die Journalisten.
- 5, 6. Advanced Course in Syntax, Composition and Reading. Freshman, *a*, elective, open to students who have passed German B of the entrance requirements; both terms [3]. Mr. Beam. *v. Jagemann*: Elements of German Syntax; *Harris*: German Composition; *Hoffmann*: Historische Erzählungen; *Chamisso*: Peter Schlemihl; *Eichendorff*: Aus dem Leben eines Tau-
genichts.
 - 7, 8. Intermediate Course in Grammar, Composition and Reading. Freshman, *e*, elective, open to students who have passed German A of the entrance requirements; both terms [2]. Mr. Beam. *Whitney*: Compendious German Grammar; *v. Jagemann*: German Composition; *Riehl*: Der stumme Ratsherr; *Moser*: Der Bibliothekar; *Freytag*: Die Journalisten.
 - 9, 10. Composition and Reading of Modern Prose and Dramas. Sophomore, *a*, elective; both terms [3]. Mr. Priest. *Heine*: Die Harzreise; *Schiller*: Der Neffe als Onkel, Die Jungfrau von Orleans; *Scheffel*: Der Trompeter von Säkkingen.
 11. Composition and Reading of Modern Prose and Dramas. Sophomore, *e*, elective; first term [3]. Mr. Priest. *Heine*: Die Harzreise; *Schiller*: Der Neffe als Onkel, Die Jungfrau von Orleans; *Scheffel*: Der Trompeter von Säkkingen.
 13. The Romantic Movement in German Literature. Lectures and Reading. Junior, *a*, elective; first term [2]. Mr. Priest. Selections from *Tieck*, *Novalis*, *Kleist*, *Fouqué* and *Grillparzer*.
 14. German Literature from 1820 to 1850; the later Romanticists and Young-Germany. Lectures and Reading. Junior, *a*, elective; second term [2]. Mr. Beam.

Selections from *Chamisso*, *Platen*, *Lenau*, *Heine* and *Gutzkow*.

Written recitations bearing on the current work of the term are conducted in the courses of the Freshman and Sophomore classes at least once a month, and collateral reading is assigned in all courses except 1, 2.

The Academic elective German courses XV, 13 and 14, are open to Seniors of the Bachelor of Science course.

FRENCH

PROFESSOR LEWIS, MR. KOREN AND DR. CRITCHLOW

- 1, 2. Beginners' course. Freshman, *a*, elective, both terms [3]. Class and collateral reading. Exercises in pronunciation and phonetic transcription (adapted from *Passy*) and studies in French prose composition. *Fraser and Squair*: French Grammar; *François*: Introductory French Prose Composition; *Van Steenderen*: Quatre Contes de Mérimée; *Sicard*: French History. This course (when once elected) requires an attendance of two successive years. Dr. Critchlow.
- 3, 4. Intermediate French. Freshman, *a*, elective, both terms [3]. For those who have passed French A on entrance. This course aims directly at securing for the student a knowledge of spoken as well as of written French. Prose composition, both original and from set models, is pursued along the lines of practical rather than literary efficiency. Readings, in French, of modern prose-writers. *Fraser and Squair*: French Grammar; *Freeborn*: Morceaux choisis de Daudet; *François*: Advanced French Prose Composition. Dr. Critchlow.
- 5, 6. Advanced French. Freshman, *a*, elective, both terms [3]. For those who have passed French B on entrance. This course is conducted, for the most part, in the French language. Readings in the more difficult French

writers of the nineteenth century: Balzac, De Banville, De Vigny, Gautier, and Hugo. Original essays in French are required in connection with literary matters of the past century and also of the present day, as shown in the best French newspapers and current literary magazines. Dr. Critchlow.

- 7, 8. Intermediate French. Freshman, *e*, elective, both terms [2]. For those who have passed French A on entrance. Mr. Koren. *Fraser and Squair*: French Grammar; *Freeborn*: Daudet; *Mérimée*: Quatre Contes.
- 9, 10. Advanced French. A continuation of 3, 4. Sophomore, *a*, elective, both terms [3]. Mr. Koren. *François*: Advanced French Prose Composition; *Eugenie Grandet*, *Gringoire*, *L'Eté de Saint Martin*.
11. Advanced French. A continuation of 7, 8. Sophomore, *e*, elective; first term [3]. Mr. Koren. *François*: Advanced French Prose Composition; *Eugenie Grandet*, *Gringoire*, *L'Eté de Saint Martin*.

The French courses XVI, 7 and 8, given in the Academic Department, are open to students of the Bachelor of Science course.

- 13, 14. Readings from the French Classics. This course is conducted in French, as far as possible. Junior, *a*, elective; both terms [2]. Professor Lewis.
15. Reading of French Lyric Poetry. This course is conducted in French, as far as possible. Senior, *a*, elective; first term [2]. Professor Lewis.
16. Advanced French Grammar. This course is conducted in French, and its object is to familiarize the student with idiomatic French constructions and to perfect his style. Senior, *a*, elective; second term [2]. Professor Lewis. *Larive et Fleury*: La deuxième année de Grammaire; *Larive et Fleury*: Exercices Français de deuxième année.

The French courses XVI, 13 and 14, given in the Academic Department are open to students of the Bachelor of Science Course.

SPANISH

PROFESSOR LEWIS

The Spanish courses XVIII, 1, 2, 3, and 4, given in the Academic Department, are open to students of the Bachelor of Science course.

MATHEMATICS

PROFESSORS ROCKWOOD AND LOVETT, DR. KELLOGG AND
DR. STROMQUIST

1. Selected chapters of Algebra. Freshman, *a*, required; first term [2]. Dr. Stromquist. *Fine*: College Algebra.
2. Elementary Theory of Equations. Freshman, *a*, required; second term [2]. Dr. Stromquist. *Fine*: College Algebra.
- 3, 4. Selected chapters of Algebra and Elementary Theory of Equations. Freshman, *e*, required; first term [2]; second term [1]. Dr. Stromquist. *Fine*: College Algebra.
- 5, 6. Plane and Spherical Trigonometry. Freshman, *a*, required; both terms [2]. Professor Rockwood. *Crockett*: Plane and Spherical Trigonometry.
7. Plane and Spherical Trigonometry. Freshman, *e*, required; first term [3]. Professor Rockwood. *Crockett*: Plane and Spherical Trigonometry.
8. Analytical Geometry. Freshman, *e*, required; second term [4]. Dr. Kellogg. *C. Smith*: Conic Sections.
9. Analytical Geometry of the Conic Sections. Sophomore, *a*, required; first term [3]. Professor Lovett. *C. Smith*: Conic Sections.

10. Differential and Integral Calculus. A general culture course for students of science. Sophomore, *a*, elective ; second term [4]. Professor Lovett or Dr. Kellogg. *Gibson* : Treatise on the Calculus.
11. Differential Calculus. Sophomore, *e*, required ; first term [5]. Dr. Kellogg. *Edwards* : Differential Calculus.
12. Integral Calculus and Elementary Differential Equations. Sophomore, *e*, required ; second term [3]. Professor Rockwood. *Edwards* : Integral Calculus.
14. Analytical Mechanics. Introductory to mathematical astronomy and physics. Junior and Senior Elective, *a* ; second term [2]. Professor Lovett. Lectures. *Love* : Theoretical Mechanics ; *Gray* : Treatise on Physics, Vol. I.
- 15, 16. Celestial Mechanics. Elementary account of the methods of dynamical astronomy with special reference to the problem of three bodies. Senior Elective, *a* ; both terms [2]. Professor Lovett. Lectures and collateral reading.

The Junior and Senior electives of the Academic Department (detailed on pp. 125-126) are open to students of the School of Science.

ASTRONOMY

PROFESSORS YOUNG AND REED

The courses in astronomy, so far as they are elective, are the same as in the Academic Department.

In the Civil Engineering Department the two following courses are required :

1. Elementary Astronomy. Lectures and recitations from text-book, with special reference to preparation for course 2. Junior, *e* ; first term [2]. Professor Reed. *Young* : Manual of Astronomy.
2. Determination of Time, Latitude, and Azimuth. Practice with the transit instrument, sextant, and theodolite.

Determination of latitude with the zenith telescope. Two class-room exercises weekly, with the necessary observatory work. Junior, *e*; second term [2]. Professor Reed. *Greene*: Spherical and Practical Astronomy; The American Ephemeris and Nautical Almanac for 1903. Also some elementary text-book on spherical trigonometry.

PHYSICS

PROFESSORS BRACKETT, MAGIE, LOOMIS, AND McCLEN-
HAN, DR. P. E. ROBINSON, AND MR. ADAMS

- 1, 2. Elementary Experimental Physics. Beginner's course in physics, including class-room and laboratory work. For Freshmen, *a*, who have passed chemistry for entrance, and for Sophomores, *a*, who have neither passed physics at entrance nor taken it during Freshman year. For Freshmen, *e*, who have passed chemistry for entrance. Both terms [3]. Professor McClenahan, Dr. P. E. Robinson, and Mr. Adams.
- 3, 4. General Physics; mechanics, heat, magnetism, electricity, sound, light. Junior, *a*, required; both terms [4]. Junior, *e*, required; second half of first term and second term [4]. Professor Loomis. *Anthony and Brackett*: Elementary Text-Book of Physics.

The elective courses in physics for the Junior and Senior years are the same as those in the Academic Department.

GENERAL CHEMISTRY

PROFESSOR McCAY AND DR. McLAUCHLAN

- 1, 2. General Chemistry. Experimental lectures and oral and written recitations. For Freshman, *a*, *e*, who have not passed chemistry on entrance; both terms [3]. Professor McCay and Dr. McLauchlan. *Remsen*: Introduction to the Study of Chemistry.

APPLIED CHEMISTRY

PROFESSORS CORNWALL AND PHILLIPS, DR. FOSTER, AND
MR. VAN NEST

The term "exercises a week" in the statements below means *single hours* for lectures and recitations, but *exercises* of two or two and one-half hours each for laboratory work. Usually where a course embraces both class-room and laboratory work one-fourth of the exercises are in the class-room. Special students are not admitted to work in analytical chemistry and mineralogy without previous examination as to their fitness for the work; and all such students must take the mathematics of Freshman year before beginning mineralogy.

2. Qualitative Analysis; including the commoner metals and acids, both in simple and mixed substances. Sophomore, *a*, elective; second term [4]. The instruction in this subject is given by one class-room exercise (lectures and recitations) and by two laboratory exercises per week. [Each laboratory exercise covers three hours, and the student receives a credit of four hours for the whole course. Professors Cornwall and Phillips. *Fresenius*: Qualitative Chemical Analysis.
3. Qualitative Analysis; advanced course. Junior, *c*, required; first term [1]. Professors Cornwall and Phillips. *Fresenius*: Qualitative Chemical Analysis. Requires course 2.
- 5, 6. Quantitative Analysis; introductory course, including simple salts, limestone, coal, felspar, etc., and sugars, milk, and similar food analysis. Junior, *c*, required; first term [4], second term [5]. Professor Phillips. *Fresenius*: Quantitative Chemical Analysis. Requires courses 2, 3.
- 7, 8. Quantitative Analysis, advanced; including complex substances, iron and steel, and technical analysis in

- general. Senior, *c*, required; both terms [6]. Professor Phillips. *Fresenius*: Quantitative Chemical Analysis; Chemical Periodicals. Requires courses 5, 6.
10. Quantitative Analysis; shorter introductory course, including simple salts, sugar, foods, etc. Senior, *g*, elective; second term [4]. Professor Cornwall. *Appleton*: Quantitative Analysis. Requires course 2.
 11. Applied Chemistry; lectures and recitations on typical organic compounds, with applications to study of water, foods, poisons, disinfectants, etc. Senior, *c*, required, *g*, elective; first term [2]. Professor Cornwall.
 12. Technical Chemistry; lectures and recitations on applications of chemistry to arts and manufactures; must be preceded by the lecture course 7. Senior, *c*, required, *g*, elective; second term [1]. Professor Cornwall.
 14. Assaying; furnace assay of gold, silver, and lead ores; lectures and laboratory work. Senior, *c*, required; second term [2]. Professors Cornwall and Phillips. *Ricketts and Miller*: Notes on Assaying.

Course 3, chemistry (XXII), Academic Department, page 130, is also open to Juniors in the School of Science.

MINERALOGY

PROFESSORS CORNWALL AND PHILLIPS, AND MR. VAN NEST

- 1, 2. Determinative Mineralogy (Blowpipe Analysis), preceded by a short course of lectures, including elements of crystallography. Sophomore, *a*, elective; first term [3]. Sophomore, *c*, required; second term [3]. Professor Phillips. *Cornwall*: Manual of Blowpipe Analysis and Determinative Mineralogy.
- 3, 4. Mineralogy, advanced; lectures, recitations, and practice in theoretical, determinative, and optical mineralogy. Senior, *c*, required, *g*, elective; both terms [1]. Professor Cornwall. *Moses and Parsons*: Mineralogy.

ORGANIC CHEMISTRY

PROFESSOR NEHER

1. Organic Chemistry; the study of the properties, synthesis and structure of the most important classes of carbon compounds of the aliphatic series. Lectures and recitations. Senior, *a*, elective; first term [2]. Requires courses Applied Chemistry 2, and XXII (p. 130) 3.
2. Organic Chemistry; aromatic compounds. Lectures and recitations. Senior, *a*, elective; second term [2]. Requires courses Applied Chemistry 2, Organic Chemistry 1, and XXII 3.
4. Organic Chemistry; preparation and experimental study of typical carbon compounds. Lectures, recitations, and laboratory work. Senior, *a*, elective; second term [4]. Requires courses Applied Chemistry 2, 3 and 5, Organic Chemistry 1, and XXII 3.

An apparatus deposit of \$15 is required for course 4.

BIOLOGY

PROFESSORS MACLOSKIE, RANKIN, McCLURE, AND DAHLGREN

1. Elementary Biology. Laboratory work, lectures and recitations. Sophomore, *a*, elective; first term [3]. Professor Rankin. *Heald*: Elementary Biology.
2. Principles of Biology. Lectures with study of museum specimens. Sophomore, *a*, elective; second term [3]. Professor Macloskie.
3. General Biology. For students who have had elementary biology. Laboratory work with study of sections. Junior, *a*, elective; first term [2]. Professor Dahlgren.

The other electives in biology for the Junior and Senior years are the same as for the Academic Department.

GRAPHICS

PROFESSOR WILLSON AND MR. MCWILLIAMS

The following courses involve recitation and examination, as well as practical work in the draughting-room.

1. Elementary Technical Drawing. Line and brush shading, conventional representations, lettering, trochoidal curves, oblique and orthographic projection, working drawings, tracing. Freshman, *e*, required; first term [2]. *Willson*: Theoretical and Practical Graphics.
3. Structure Drawing. Detail and assembly drawings, from measurement or blue-prints, of bridges, etc. Sophomore, *e*, required; first term [1].
5. Intersections and Developments. Sophomore, *e*, required; first term [1]. *Willson*: Theoretical and Practical Graphics.
6. Structure Drawing. Course 3 continued. Sophomore, *e*; second term [1].
7. Technical Drawing. Line and brush work, lettering, projections, tracing, model-making, kinematic geometry, crystallographic projection, curves. Sophomore, *a*, elective; first term [3]. *Willson*: Practical Engineering Drawing.
8. Graphic solution of projective and kinematic problems, higher plane curves, elementary mechanism, working drawings. Sophomore, *a*, elective; second term [3]. Requires course 7. Sophomore, *e*, required; second term [2]. *Willson*: Theoretical and Practical Graphics.
9. Descriptive Geometry, pure, and also as applied to developable, double-curved, and warped surfaces, and including spherical projections and trihedrals. Junior, *e*, required, *a*, elective; first term [3]. *Willson*: Descriptive Geometry.

10. Shadows and Perspective; mathematical theory, with applications mainly to architectural subjects. Junior, *e*, required, *a*, elective; second term [2]. Requires course 9. *Willson*: Shadows and Perspective.
11. Stereotomy. Descriptive geometry applied to the solution of such problems in stone-cutting as are likely to arise in railroad or architectural construction. Senior, *e*, required; first term [1]. Senior, *a*, elective; first term [2]. Requires course 9. *Warren*: Stone-Cutting.
12. Valve Motion. Lectures; also graphical analysis of valves by motion curves and the Bilgram diagram. Senior, *e*, required, *a*, elective; second term [1]. *Halsey*: Slide Valve Gears; *Forney*: Catechism of the Locomotive.

APPLIED MECHANICS

PROFESSORS McMILLAN AND SMITH, AND MR. PARIS

- 2, 3. Applied Mechanics; analytic and graphic. Sophomore, *e*, required; second term [3]. Junior, *e*, required; first term [4]. Professor Smith.
5. Graphical Statics. Applications. Junior, *e*, required; first term [2]. Professor McMillan and Mr. Paris.
6. Elasticity and Strength of Materials. Junior, *e*, required; second term [3]. Professor Smith and Mr. Paris.
- 7, 8. Framed Structures. Senior, *e*, required; first term [5]; second term [2]. Professor McMillan and Mr. Paris.
9. Hydraulics. Theory. Senior, *e*, required; first term [2]. Professor Smith and Mr. Paris.
- 11, 12. Motors. Senior, *e*, required, *a*, elective; both terms [3]. Professor McMillan and Mr. Paris.
13. Masonry Structures. Senior, *e*, required; first term [3]. Professor Smith and Mr. Paris.

CONSTRUCTIONS

PROFESSORS McMILLAN AND SMITH, AND MR. PARIS

2. Structural Materials; foundations. Senior, *e*, required; second term [2]. Professor Smith and Mr. Paris.
4. Construction of Water Works. Senior, *e*, required; second term [2]. Professor Smith.
6. Sewerage and Drainage. Senior, *e*, required; second term [2]. Professor McMillan and Mr. Paris.
8. Roads. Senior, *e*, required; second term [2]. Professor McMillan and Mr. Paris.
10. Laboratory. Senior, *e*, required; second term [2]. Professors McMillan and Smith.

GEODESY

PROFESSOR HARRIS AND MR. SINCERBEAUX

The term "exercises per week," in the following statement, means single hours for lectures and recitations, two hours for each drawing exercise, and three hours for each field exercise.

1. Land Surveying. Theory of chain and compass surveying. Lectures and recitations. Freshman, *e*, required; first term [1]. Professor Harris and Mr. Sincerbeaux. *Staley-Gillespie*: Land Surveying.
2. Line and Angle Measurements, farm surveying; lectures, recitations and field work. Freshman, *e*, required; second term [3]. Professor Harris and Mr. Sincerbeaux. *Staley-Gillespie*: Land Surveying.
3. Topographical Drawing in pen work and colors; lettering. Sophomore, *e*, required; first term [3]. Professor Harris and Mr. Sincerbeaux. *McMillan-Smith*: Topographical Drawing

4. Topographical Drawing, map of farm survey, platting of field notes. Sophomore, *e*, required; second term [1]. Professor Harris and Mr. Sincerbeaux.
5. Structure and Adjustment of Engineer's Field Instruments; transit work and leveling; lectures and recitations. Sophomore, *e*, required; first term [3]. Professor Harris. *Staley-Gillespie*: Land Surveying.
6. Topographical Surveying, Triangulation and Leveling. Recitations and field work. Sophomore, *e*, required; second term [3]. Professor Harris and Mr. Sincerbeaux.
7. Surveying. Theory and practice, with special reference to business life. Junior, *a*, elective; first term [2]. Professor Harris.
9. Railroad Engineering. Lectures, recitations, field and office work. Junior, *e*, required; first term [3]. Professor Harris. *Searles*: Field Engineering.
10. Railroad Engineering, Mine and Hydrographic Surveying. Recitation and field work. Junior, *e*, required; second term [3]. Professor Harris. Lectures.
12. Summer Field Practice. Extended field operations and office work. Junior, *e*, required; two weeks following close of second term. Professor Harris and Mr. Sincerbeaux.
13. Railroad Economics. Town surveying. Senior, *e*, required; first term [2]. Professor Harris.

LECTURES ON HYGIENE

COL. WOODHULL

1. Personal Hygiene: to include elementary anatomy and physiology and the general care of the body; the principles of exercise, food, clothing and ventilation; the action of tobacco and alcohol; avoidable diseases and their consequences; and the essentials of first aid. Freshman, *a*, and Freshman, *e*, required; first term [1]. Col. Woodhull.

LECTURES ON MUSIC

MR. PEASE

- 1, 2. Harmony. This course begins with the elementary principles of musical theory, including intervals, scales, and notation, followed by the study of chords in their various relations, triads and seventh chords with their inversions, altered chords, passing and changing notes, suspensions, cadences, sequences, organ point, modulation and the harmonizing of melodies. Students desiring to take this course must satisfy the instructor in advance as to their musical qualifications. Ability to play the pianoforte or an equivalent instrument is required. Recitations and written exercises. Senior, *a*, elective; both terms [2]. Mr. Pease.
4. Counterpoint. This course requires a thorough knowledge of the principles of harmony and marks the beginning of actual composition. The work consists in general in the harmonizing of melodies and chorals, selected as *canti fermi*, with other voices. Two, three, and four part counterpoint. Double counterpoint. Open to properly qualified Seniors, *a*, second term [2]. Mr. Pease.
6. History of Music. The evolution of musical art is traced from the earliest times to the present and an inquiry made into the music systems of the Greeks and other ancient nations, the early Christian music, the Troubadours and Minnesingers, the beginning and development of opera, oratorio and instrumental music, together with a consideration of the works of the great composers and the various forms of composition. This course is one not requiring any technical skill of the student as it treats of the art from the æsthetic and historical standpoint. Lectures and classroom illustrations. Junior, *a*, elective; second term [2]. Mr. Pease.

DEPARTMENT OF ELECTRICAL ENGINEERING

PROFESSORS BRACKETT AND MCCLENAHAN

The course in Electrical Engineering is designed to furnish instruction in the theory of electricity and in its application in the arts and industries. The special course of study in electricity occupies two years of graduate work.

REQUIREMENTS FOR ADMISSION

I. Graduates of the University, either in the Academic Department or in the John C. Green School of Science, who have taken satisfactory courses in French and German and in mathematics, including calculus and differential equations, will be admitted to the course in Electrical Engineering without examination.

II. Applicants who are graduates of other institutions must satisfy the professors in charge that they have sufficient knowledge of mathematics, including calculus and differential equations, of physics and chemistry, and of French and German, to enable them to pursue the course with profit.

III. Applicants who are not graduates of any institution may be admitted to the course if they show their fitness for it on examination in mathematics, including calculus, differential equations, analytic mechanics, mechanical drawing and descriptive geometry, general and analytical chemistry, physics, geology, astronomy, English language and literature, French and German.

III. Students, not candidates for a degree, may be received by special arrangements with the professors in charge.

COURSE OF STUDY

First Year:—The Mathematical Theory of Electricity. *Duhem*: Leçons sur l'Électricité et le Magnétisme, with references to *Faraday*, *Maxwell*, *Mascart et Joubert*, *Hertz*, et als.

Electrical Measurements. *Gray*: Absolute Measurements in Electricity and Magnetism; *Ewing*: Magnetic Induction in Iron and Other Metals. Two days a week are left free for elementary electrical measurements, with reference to *Stewart and Gee, Kohlrausch, Gray, Ewing, et als.* Theory of Electro-Motors. *Thompson*: Dynamo-Electric Machinery. Machine Designing.

Strength of Materials, three hours a week; Mechanism, two hours a week, and Theory of Machines, three hours a week for the year, are taken with the classes in the Civil Engineering Department.

Second Year:—Study of the Physics of the Ether as related to electric and magnetic phenomena. *Drude*: Physik des Aethers.

Theory and practical applications of alternate currents. *Fleming*: Alternate Current Transformer; *Thompson*: Poly-phase Electric Currents; with reference to *Ferraris, Steinmetz, et als.*

Transformer and machine designing.

Collateral lectures on the technical applications of electricity in telegraphy, telephony, electro-metallurgy and electro-chemistry, electric lighting, transmission of power, etc.

Advanced Electrical Measurements and Electrical Testing.

In addition to these courses a meeting is held once a week, at which reports on current electrical literature are made by the students.

DEGREE

On completion of this course the student is entitled to apply for the degree of Electrical Engineer. With his application he must present an acceptable thesis on some subject connected with electrical science.

EXHIBIT OF STUDIES FOR 1903-1904

NOTE.—The numbers in column indicate exercises per week. The numbers immediately after subjects refer to Courses of Instruction in the School of Science. The Roman and Arabic numerals in parenthesis refer to subjects and courses as given in the Courses of Instruction in the Academic Department.

COURSE IN GENERAL SCIENCE (*a, g*)

FRESHMAN YEAR

<i>First Term</i>		<i>Second Term</i>	
Mathematics 1, 5	4	Mathematics 2, 6	4
English 1	3	English 2	3
{ General Chemistry 1, or }	3	{ General Chemistry 2, or }	3
{ Physics 1 }		{ Physics 2 }	
Hygiene 1	1		—
Required	11	Required	10
Two elective courses	6	Two elective courses	6

FRESHMAN ELECTIVE COURSES

The election holds for both terms

<i>First Term</i>		<i>Second Term</i>	
Latin 1	3	Latin 2	3
German 1, 3, or 5	3	German 2, 4, or 6	3
French 1, 3, or 5	3	French 2, 4, or 6	3

SOPHOMORE YEAR

<i>First Term</i>		<i>Second Term</i>	
Mathematics 9	3	Philosophy 2	2
English 3	3	Physics 2	3
Physics 1	3		—
Required	9	Required	5
Two elective courses	6	Three elective courses 9, 10 or 11	

SOPHOMORE ELECTIVE COURSES

GROUP A.—One subject must be chosen from this group and carried through both terms. These subjects may be begun only in the first term.

<i>First Term</i>		<i>Second Term</i>	
Latin 3	3	Latin 4	3
German 9	3	German 10	3
French 9	3	French 10	3

NOTE.—A Sophomore also has the privilege of resuming the study of the language not taken by him in Freshman year. Beginning in 1904-1905, any Sophomore who has not studied both French and German may join the beginners' course in the language he lacks. See Freshman elective courses.

GROUP B.—In the first term one subject must be chosen from this group in addition to the one taken under GROUP A. In the second term two additional subjects must be chosen.

Biology and graphics may not be begun in the second term.

<i>First Term</i>		<i>Second Term</i>	
Latin 3	3	Latin 4	3
German 9	3	German 10	3
French 9	3	French 10	3
Biology 1	3	Biology 2	3
Mineralogy 1	3	Applied Chemistry 2	4
Graphics 7	3	Graphics 8	3
		History 2	3
		English 4	3
		Mathematics 10	4

JUNIOR YEAR

<i>First Term</i>		<i>Second Term</i>	
Physics 3	4	Physics 4	4
Philosophy 3	2	Geology (xxiv 2)	2
Philosophy 5	3	Political Economy 2	3
Required	9	Required	9
Three elective courses	6 or 7	Three elective courses	6

JUNIOR ELECTIVE COURSES

The elective courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Juniors only.

As some of these courses are given at the same hours, they are mutually exclusive. These exclusions in elective courses are shown in the weekly schedules on the following pages.

*First Term**Second Term*

PHILOSOPHY

<i>Mental Philosophy</i> (II 5 I)	2	<i>Mental Philosophy</i> (II 4)	2
<i>Mental Philosophy</i> (II 9)	2	<i>Mental Philosophy</i> (II 6 I)	2
		<i>Mental Philosophy</i> (II 10)	2

HISTORY

<i>History</i> (III 5 II)	2	<i>History</i> (III 6 II)	2
<i>History</i> (III 7)	2	<i>History</i> (III 8)	2
<i>History</i> (III 9 II)	2	<i>History</i> (III 10 II)	2
<i>History</i> (III 11)	2		

NOTE.—No Junior may take more than two courses in History in one term.

JURISPRUDENCE AND POLITICS

<i>Jur. & Pol.</i> (IV 1 I)	2	<i>Jur. & Pol.</i> (IV 2 I)	2
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ARCHÆOLOGY AND ART

<i>Arch. & Art</i> (VI 1)	2	<i>Arch. & Art</i> (VI 2)	2
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LATIN

<i>Latin</i> 5 II	2	<i>Latin</i> 6 II	2
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ENGLISH

<i>English</i> 5	2	<i>English</i> 6	2
<i>English</i> (XII 5)	2	<i>English</i> (XII 6)	2
<i>English</i> (XII 7)	2	<i>English</i> (XII 8)	2
<i>English</i> (XII 9)	2	<i>English</i> (XII 10)	2
<i>English</i> (XII 13 I)	2		
<i>Course in Debate</i> (See p. 117)	2		

MODERN LANGUAGES

<i>German</i> 13	2	<i>German</i> 14	2
<i>French</i> 13	2	<i>French</i> 14	2
<i>French</i> (XVI 7 I)	2	<i>French</i> (XVI 8 I)	2
<i>Italian</i> (XVII 1)	2	<i>Italian</i> (XVII 2)	2
<i>Spanish</i> (XVIII 1)	2	<i>Spanish</i> (XVIII 2)	2

MATHEMATICS

<i>Mathematics</i> (XIX 9)	2	<i>Mathematics</i> 14	2
<i>Mathematics</i> (XIX 11)	2	<i>Mathematics</i> (XIX 10)	2
		<i>Mathematics</i> (XIX 12)	2
		<i>Mathematics</i> (XIX 14)	2

ASTRONOMY

Astronomy (XX 1)	3
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PHYSICS

<i>Physics</i> (XXI 4 1)	2
<i>Physics</i> (XXI 6) (Math XIX 14)	2
<i>Physics</i> (XXI 8)	2

CHEMISTRY

Chemistry (XXII 3)	2
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PHYSICAL GEOGRAPHY

Physical Geography (XXIII 2)	2
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GEOLOGY

Geology (XXIV 3)	2	Geology (XXIV 4)	2
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BIOLOGY

Biology 3	2	Biology (XXV 4)	2
Biology (XXV 3)	2	Biology (XXV 6)	2
		<i>Biology</i> (XXV 8)	2
		<i>Biology</i> (XXV 10)	2

GRAPHICS

Graphics 9	3	Graphics 10	2
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GEODESY

Geodesy 7	2
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MUSIC

Music 6	2
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SENIOR YEAR

<i>First Term</i>		<i>Second Term</i>	
Seven elective courses	14 or 15	Seven elective courses	14 or 15

The elective courses in *Italics* are open to both Juniors and Seniors. Those in Roman type are open to Seniors only.

As some of these courses are given at the same hours, they are mutually exclusive. These exclusions in elective courses are shown in the weekly schedules on the following pages.

<i>First Term</i>		<i>Second Term</i>	
PHILOSOPHY			
Moral Philosophy (I 5)	2	<i>Mental Philosophy</i> (II 6 I)	2
Moral Philosophy (I 9)	2	Mental Philosophy (II 14)	2
<i>Mental Philosophy</i> (II 5 I)	2	Mental Philosophy (II 16)	2
Mental Philosophy (II 13)	2	Mental Philosophy (II 18)	2
Mental Philosophy (II 17)	2	Mental Philosophy (II 20)	2
Mental Philosophy (II 19)	2	Mental Philosophy (II 22)	2

HISTORY			
<i>History</i> (III 5 II)	2	<i>History</i> (III 6 II)	2
<i>History</i> (III 9 II)	2	<i>History</i> (III 10 II)	2
<i>History</i> (III 11)	2	History (III 14)	2
History (III 13)	2	History (III 16)	2
History (III 15)	2	History (III 18)	2

JURISPRUDENCE AND POLITICS			
<i>Jur. & Pol.</i> (IV 1 I)	2	<i>Jur. & Pol.</i> (IV 2 I)	2
Jur. & Pol. (IV 3)	2	Jur. & Pol. (IV 4)	2
Jur. & Pol. (IV 5)	2		

POLITICAL ECONOMY AND SOCIOLOGY			
Pol. Econ. & Soc. (V 3)	2	Pol. Econ. & Soc. (V 4)	2
Pol. Econ. & Soc. (V 5 a)	2	Pol. Econ. & Soc. (V 6 b)	2
Pol. Econ. & Soc. (V 7)	2		
Pol. Econ. & Soc. (V 11)	2		

ARCHÆOLOGY AND ART			
<i>Arch. & Art</i> (VI 1)	2	<i>Arch. & Art</i> (VI 2)	2
Arch. & Art (VI 3)	2	Arch. & Art (VI 4)	2
Arch. & Art (VI 7)	2	Arch. & Art (VI 8)	2

ARCHITECTURE

Architecture (VII 1)	2	Architecture (VII 2)	2
Architecture (VII 3)	2	Architecture (VII 4)	2

LATIN

<i>Latin</i> 5 II	2	<i>Latin</i> 6 II	2
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ENGLISH

<i>English</i> (XII 9)	2	<i>English</i> (XII 10)	2
English (XII 11)	2	English (XII 12)	2
<i>English</i> (XII 13 1)		English (XII 14)	2
English (XII 17)	2	English (XII 16)	2
English (XII 19)	2	English (XII 22)	2
English (XII 21)	2		
<i>Course in Debate</i> (See p. 117)	2		

MODERN LANGUAGES

German (XV 13)	2	German (XV 14)	2
French 15	2	French 16	2
<i>French</i> (XVI 7 1)	2	<i>French</i> (XVI 8 1)	2
French (XVI 13)	2	French (XVI 14)	2
<i>Italian</i> (XVII 1)	2	<i>Italian</i> (XVII 2)	2
Italian (XVII 3)	2	Italian (XVII 4)	2
<i>Spanish</i> (XVIII 1)	2	<i>Spanish</i> (XVIII 2)	2
Spanish (XVIII 3)	2	Spanish (XVIII 4)	2

MATHEMATICS

Mathematics 15	2	<i>Mathematics</i> 14	2
<i>Mathematics</i> (XIX 9)	2	Mathematics 16	2
<i>Mathematics</i> (XIX 11)	2	<i>Mathematics</i> (XIX 10)	2
Mathematics (XIX 15)	2	<i>Mathematics</i> (XIX 12)	2
Mathematics (XIX 17)	2	<i>Mathematics</i> (XIX 14)	2
		Mathematics (XIX 16)	2
		Mathematics (XIX 18)	2

ASTRONOMY

Astronomy (XX 3)	2	Astronomy (XX 6)	2
Astronomy (XX 5)	2		

PHYSICS

Physics (XXI 5)	2	<i>Physics</i> (XXI 4 1)	2
Physics (XXI 7)	2	<i>Physics</i> (XXI 6) (Math XIX 14)	2
Physics (XXI 9)	2	<i>Physics</i> (XXI 8)	2
Physics (XXI 11)	2	Physics (XXI 10)	2
		Physics (XXI 12)	2

CHEMISTRY AND MINERALOGY

Applied Chemistry II	2	Applied Chemistry 10	4
Mineralogy 3	1	Applied Chemistry 12	1
Organic Chemistry I	2	Mineralogy 4	1
		Organic Chemistry 2	2
		Organic Chemistry 4	4

PHYSICAL GEOGRAPHY

Physical Geography (XXIII 4)	2
Physical Geography (XXIII 6)	2

GEOLOGY

Geology (XXIV 5)	2	Geology (XXIV 6)	2
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BIOLOGY

Biology (XXV 11)	2	<i>Biology</i> (XXV 8)	2
Biology (XXV 13)	2	<i>Biology</i> (XXV 10)	2
Biology (XXV 15)	2	Biology (XXV 12)	2
Biology (XXV 17)	2	Biology (XXV 14)	2
Biology (XXV 19)	2	Biology (XXN 18)	2
		Biology (XXV 22) (— Ment. Ph. II 22)	2

GRAPHICS

Graphics II	2	Graphics 12	1
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APPLIED MECHANICS

(See also Mathematics and Physics)

Applied Mechanics II	3	Applied Mechanics 12	3
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MUSIC

Music I	2	Music 2	2
		Music 4	2

SCHOOL OF SCIENCE FRESHMAN FIRST TERM SCHEDULE—1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8	French 1-(2) Hygiene 1	Mathematics 7-(3) e	English 1-(2) French 5 Mathematics 1-(4) e	German 1 French 1-(1) Mathematics 7-(3) e	Mathematics 1-(4) e	Mathematics 1-(1) e
9	Physics 1 Chemistry 1-(1) German 5	Mathematics 7-(2) Chemistry 1-(1) German 5	English 1-(1) German 1 French 1-(1) Mathematics 3-(3) Hygiene 1-(1) e	German 7 French 7	English 1-(1) French 1-(2) e	English 1-(1) Mathematics 1-(2) e
10	Latin 1-(1) German 3-(2) French 3-(1) Mathematics 7-(3) e	Latin 1-(2) German 3-(1) French 3-(2) Mathematics 7-(2) e	Latin 1-(1) English 1-(2) German 3-(2) French 3-(1) Mathematics 7-(1) e	English 1-(4) English 1-(3) Mathematics 1-(1) Graphics 1	German 3-(2) French 3-(1) Mathematics 3-(2) e	Latin 1-(2) English 1-(2) e
11	German 3-(3) French 5 Chemistry 1-(1) e	French 1-(2) Chemistry 1-(2) e	Mathematics 7-(2) Mathematics 1-(3) e	Mathematics 5-(4) Mathematics 1-(2) Graphics 1	English 1-(2) German 1 French 1-(1) Mathematics 7-(1) e	English 1-(1) Mathematics 1-(3) e
3	Latin 1-(2) German 3-(1) French 1-(2) Graphics 1	English 1-(2) German 7 French 7 Mathematics 5-(1) e		German 3-(3) Mathematics 3-(1) German 5	English 1-(2) Mathematics 5-(1) Mathematics 3-(2) e	
4	Mathematics 5-(2) Chemistry 1-(1) Graphics 1	English 1-(4) Mathematics 5-(2) Chemistry 1-(1) e		English 1-(1) Mathematics 5-(3) Mathematics 3-(2) e	English 1-(3) English 1-(4) Mathematics 5-(2) Graphics 1	
5	Mathematics 7-(2) Mathematics 3-(3) Chemistry 1-(2) e	English 1-(1) French 5 Mathematics 5-(3) Chemistry 1-(2) e		Hygiene 1-(2) e	Latin 1-(2) German 3-(1) French 3-(2) Graphics 1	

NOTE.—Figures in brackets refer to sections of the classes.

WEEKLY SCHEDULES

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SCHOOL OF SCIENCE FRESHMAN SECOND TERM SCHEDULE—1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8		German 4-(2) French 4-(3)	Mathematics 6-(2) Mathematics 3-(3)	German 4-(2) French 4-(1) Mathematics 8-(2)	German 8 French 8	German 8 French 8 Mathematics 3-(4)
9	Latin 3-(1) Mathematics 8-(2) Physics 2 Chemistry 3-(1)	Latin 3-(1) Mathematics 8-(2) Chemistry 3-(1)	English 3-(3) Mathematics 4-(1)	English 3-(3) Mathematics 6-(2) Mathematics 8-(1)	English 3-(2) German 6 French 6	Latin 3-(1) English 3-(2) Mathematics 3-(1)
10	German 2 French 2	English 3-(1) German 2 French 2	German 4-(1) French 4-(2) Mathematics 4-(2)	German 2 French 2	English 3-(3) Mathematics 3-(1) Geodesy 2	Mathematics 3-(2) Mathematics 8-(1)
11	Latin 2-(2) Mathematics 8-(1) Chemistry 3-(2)	Latin 2-(2) Mathematics 8-(1) Chemistry 3-(2)	English 3-(1) German 4-(2) French 4-(1)	German 6 French 6	German 4-(1) French 4-(2) Geodesy 2	Latin 3-(2) English 3-(1) Mathematics 8-(2)
3	German 4-(2) French 6 Graphics 6	English 3-(2) German 6 French 6		Geodesy 2	Mathematics 3-(4) Geodesy 2	
4	Chemistry 3-(2) Graphics 6	English 3-(2) Mathematics 6-(1) Chemistry 3-(1)		English 3-(2) Mathematics 6-(1) Geodesy 2	English 3-(2) Mathematics 6-(3) Geodesy 2	
5	Mathematics 3-(3) Chemistry 3-(1)	English 3-(2) Mathematics 3-(2) Chemistry 3-(2)		English 3-(2) Mathematics 6-(3) Geodesy 2	English 3-(2) Geodesy 2	

NOTE.—Figures in brackets refer to sections of the classes.

SCHOOL OF SCIENCE SOPHOMORE FIRST TERM SCHEDULE—1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8	German 11 French 11 Graphics 7	Latin 3 Graphics 5	German 9-(1) French 9-(a) Mathematics 11-(1)	Mathematics 9-(a) Mineralogy 1-(1) Graphics 7 Geodesy 3 & 5	German 11 French 11 Mathematics 9-(a) Mineralogy 1-(1)	Mathematics 9-(1)
9	Mathematics 11-(1) Graphics 7	Graphics 5	German 9-(a) French 9-(1) Mathematics 11-(a)	Mathematics 9-(a) Mineralogy 1-(1) Graphics 7 Geodesy 3 & 5	Mathematics 9-(a) Mathematics 11-(1) Mineralogy 1-(1)	Mathematics 9-(3)
10	German 9-(a) French 9-(1)	Mathematics 11-(1) Biology 1-(1)	English 3-(1) Geodesy 3 & 5	Mathematics 9-(1) Mathematics 11-(1)	Mathematics 9-(1) Mathematics 11-(1)	Mathematics 9-(a) Mineralogy 1-(1) Geodesy 3 & 5
11	German 9-(1) French 9-(a) Mathematics 11-(a)	German 3-(3) Mathematics 11-(a) Biology 1-(1)	English 3 Geodesy 3 & 5	Mathematics 11-(a)	English 3-(3)	Latin 3 Mineralogy 1-(1) Geodesy 3 & 5
2	Mineralogy 1-(a)	Biology 1-(a)		Mineralogy 1-(a)	Mineralogy 1-(a) Graphics 7	
3	Mineralogy 1-(a) Geodesy 3 & 5	Biology 1-(a) Geodesy 3 & 5		German 11 French 11 Physics 1-(1) Mineralogy 1-(a)	Latin 3 Mineralogy 1-(a) Graphics 7 Geodesy 3 & 5	
4	Biology 1 Geodesy 3 & 5	German 9-(a) French 9-(1) Geodesy 3 & 5		English 3-(a) Graphics 3	English 9-(a) Geodesy 3 & 5	
5	Geodesy 3 & 5	German 9-(1) French 9-(a) Geodesy 3 & 5		English 3-(3) Physics 1-(a) Graphics 3	English 3-(1) Geodesy 3 & 5	

NOTE.—Figures in brackets refer to sections of the classes.

WEEKLY SCHEDULES

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SCHOOL OF SCIENCE'SOPHOMORE'S SECOND TERM SCHEDULE.—1903—1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8	Mineralogy 2-(a) a	Latin 4 Graphics 8 a	German 10-(a) French 10-(t) a	Ap. Chemistry 2 a	English 4-(a) Mineralogy 2-(t) a	Mathematics 12-(a) Mineralogy 2-(t) a
9	Mineralogy 2-(a) Biology 2 a	Graphics 8 a	Biology 2 Mechanics 2 a	Ap. Chemistry 2 Mechanics 2 a	English 4-(t) Mathematics 12-(a) Mineralogy 2-(t) a	Mineralogy 2-(t) Phil. 2 a
10	English 4-(a) Geodesy 4 & 6 a	Biology 2 Geodesy 4 & 6 a	Latin 4 Graphics 8 a	English 4 Mathematics 12-(t) Mineralogy 2-(a) a	German 10-(a) French 10-(t) Mechanics 2 a	German 10-(a) Mathematics 12-(t) Mineralogy 2-(a) a
11	English 4-(t) Geodesy 4 & 6 a	Geodesy 4 & 6 Philosophy 2 a	Graphics 8 a	Mathematics 10 Mineralogy 2-(a) a	German 10-(t) French 10-(a) Mathematics 12-(t) Mineralogy 2-(a) a	German 10-(a) French 10-(t) Mineralogy 2-(a) a
2	Ap. Chemistry 2 a	Ap. Chemistry 2 a		Mineralogy 2-(t) a	Graphics 8 a	
3	Geodesy 4 & 6 Ap. Chemistry 2 a	Ap. Chemistry 2 Geodesy 4 & 6 a	German 10-(t) French 10-(a) Mathematics 12-(a) Mineralogy 2-(t) a	German 10-(t) French 10-(a) Mathematics 12-(a) Mineralogy 2-(t) a	Latin 4 Graphics 8 a	
4	Ap. Chemistry 2 Geodesy 4 & 6 a	Ap. Chemistry 2 Geodesy 4 & 6 a		Physics 2-(t) a	Mathematics 10 a	
5	Mathematics 10 Geodesy 4 & 6 a	Mathematics 10 Geodesy 4 & 6 a		Physics 2-(a) a		

SCHOOL OF SCIENCE JUNIOR FIRST TERM SCHEDULE--1993-1994

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8			Mechanics 3 Philosophy 3 Psychology English Lit.	Mechanics 3 English Lit.	French 13 Mechanics 3 Shakespeare	French 13 Mechanics 3 Shakespeare
9	Chemistry 3 & 5 History V	Chemistry 3 & 5 History V	Physics 3	Physics 3	Physics 3	Physics 3
10	Graphics 9 Jur. & Pol. I	Graphics 9 Jur. & Pol. I	Graphics 9 English XIII History VII	Latin 5 Geodesy 7 & 9 English VIII History VII	English 5 Geodesy 7 & 9 French Lit.	Geodesy 7 & 9 French Literature
11	Astronomy 1 Graphics 9 Spanish I Art I	Astronomy 1 Graphics 9 Spanish I Art I	Astronomy 1 Graphics 9 History IX	English 5 Geodesy 7 & 9 History IX	Geodesy 7 & 9 Philosophy 5 Geology III German XI	Geodesy 7 & 9 Philosophy 5 Geology III German XI
3	Old Eng. IX Geometry	Old English IX Geometry		Geodesy 7 & 9 Italian I 2 p. m. Biol. III	Geodesy 7 & 9 Italian I 2 p. m. Biol. III	
4	German 13 Mechanics 5 Philosophy 5-(1)	Latin 5 Mechanics 5 Philosophy 5-(1)		Geodesy 7 & 9 Diff. Equa.	Geodesy 7 & 9 Diff. Equa.	
5	Philosophy 3 Mechanics 5	German 13 Mechanics 5		Geodesy 7 & 9 Geology III	Geodesy 7 & 9 Geology III	

NOTE.—Figures in brackets refer to sections of the classes. Roman numerals refer to courses in Academic Department.

WEEKLY SCHEDULES

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SCHOOL OF SCIENCE JUNIOR SECOND TERM SCHEDULE—1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8		Mechanics 6	Spencer & Milton Averr. Morph. Adv. Logic	Spencer & Milton Averr. Morph. Adv. Logic	Physics IV Italian 2 History X Roman History	Physics IV Italian 2 History X Roman History
9		Physics 4	Physics 4	Physics 4	Mechanics 6	Geology 2
10	Jur. & Pol. II Art II	Graphics 10 Jur. & Pol. II Art II	Ap. Chemistry 6 Geodesy 10 Med. History	Geodesy 10 Med. History	Geology 2 French Lit. Pol. Econ. I	Graphics 10 French Lit. Pol. Economy I
11	Spanish II Frac. Physics	Graphics 10 Spanish II Frac. Physics	Latin 6 Geodesy 10 Frac. Botany IV History X	Latin 6 Geodesy 10 Frac. Botany IV History X	Physics 4 Pol. Economy II	Graphics 10 Pol. Economy II
3	French 14 Mechanics 6 Geometry Vert. Anat. VI Old & Mid. Eng. Phys. Geog. II	French 14 Astronomy 2-(3) Geometry Vert. Anatomy VI Old & Mid. Eng. Phys. Geog. II		Geodesy 10 2 p. m. Exp. Pay.	English 6 Astronomy 2-(4) 2 p. m. Exp. Pay.	
4	German 14 Astronomy 2-(1)	German 14 Astronomy 2-(4)		Geodesy 10 Diff. Equations	Astronomy 2-(3) Diff. Equations	
5	Astronomy 2-(2) Pol. Economy 2	Astronomy 2-(2) Pol. Economy 2		Geodesy 10 Geology IV	Astronomy 2-(4) Geology IV	

NOTE.—Figures in brackets refer to sections of the classes. Roman numerals refer to courses in Academic Department.

SCHOOL OF SCIENCE SENIOR FIRST TERM SCHEDULE—1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8		Osteology	History XIII a Osteology a Hist. Nat. Phil.	History XIII a Physiology a Hist. Nat. Phil.	Nerv. System	Nerv. System
9	Geodesy 13 Gen. Psych. XIX History V Amer. Literature	Mechanics 9 a Ad. Gen. Psych. a American Lit. a Roman History	Mechanics 9 a Hist. of Phil. a Architecture I	Mechanics 13 a Hist. of Phil. a Architecture I	Mechanics 13	Mechanics 13
10	Geodesy 13 a Eur. & Pol. I	Geodesy 13 a Eur. & Pol. I	Chemistry 7 a English XIII	English XIII	Mineralogy 3 a French Literature a Paleontology	Paleontology
11	Mechanics 7 & 11 a Theism a Spanish I a Prac. Physics a Art I	Geodesy 13 a Theism a Spanish I a Prac. Physics a Art I	Mechanics 7 & 11 a Adv. Ex. Psych. a Geometry a History IX	Mechanics 7 & 11 a History IX a Adv. Exp. Psych. a Geometry	Organ. Chem. 1 a Mechanics 7 & 11 a Am. History a Prac. Astronomy	Organic Chem. 1 a Mechanics 7 & 11 a Am. History a Prac. Astronomy
3	Old English a Geometry a Old French a Mamm. Anat.	Graphics 11 a Old English a Geometry a Old French a Mamm. Anat.		Pol. Econ. III a Physiology a Italian I	Pol. Econ. III a Italian I	
4	French 15 a Chemistry 11 a Art 3	Graphics 11 a French 15 a Art 3		Art IX a Diff. Equations a Geometry a Italian III	Art IX a Diff. Equations a Geometry a Italian III	
5	Mechanics 7 & 11 a Spanish III a Indus. History a Th. of Functions	Chemistry 11 a Spanish III a Indus. History a Th. of Functions		Mechanics 7 & 11	Mechanics 7 & 11	

NOTE.—Figures in brackets refer to sections of the classes. Roman numerals refer to courses in Academic Department.

WEEKLY SCHEDULES

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SCHOOL OF SCIENCE SENIOR SECOND TERM SCHEDULE—1903-1904

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8	Embryology Th. of Functions	Embryology Th. of Functions	Construction to Hist. Nat. Phil. Invert. Morph. International Law Phys. Geography	Hist. Nat. Phil. Invert. Morph. International Law Phys. Geog. VI	Ap. Chemistry Human History Histology X Physics IV Italian II History XIV	Ap. Chemistry Human History Histology X Physics IV Italian II History XIV
9	Mechanics 12 Geometry XVI Adv. Gen. Psy.	Mechanics 12 Geometry XVI Phys. Geog. IV Adv. Gen. Psy.	Hist. of Phil. Eng. Lit. XIV	Mechanics 8 Hist. of Phil. Eng. Lit. XIV	Mechanics 12 Jur. & Pol. VI Her. & Descent	Jur. & Pol. 6 Her. & Descent
10	Jur. & Pol. II Art II Old French	Jur. & Pol. II Art II Old French	German XIV Architecture Eng. Lit. XVI	German XIV Architecture Eng. Lit. XVI	Paleontology French Lit.	Paleontology French Lit.
11	Ap. Chemistry 8 Construction 2 Spanish II Pr. Phys. VIII & X	Construction 2 Spanish II Pr. Phys. VIII & X	Ap. Chemistry 10 Construction 4 Adv. Ex. Psych. History X	French 16 Construction 4 Adv. Ex. Psych. History X	French 16 Constructions 8 Prac. Astronomy Amer. History	Construction 8 Prac. Astronomy Amer. History
3	Solid Geometry Old & Mid. Eng. Histology XII	Graphics 12 Solid Geometry Old & Mid. Eng. Histology XII		Pol. Economy IV	Pol. Economy IV	
4	Art IV	Graphics 12 Art IV		Art X Geology VI Diff. Equations	Art X Geology VI Diff. Equations	
5	Construction 6 Phys. Geog. VIII	Construction 6 Phys. Geog. VIII		Mechanics 8 Pol. Econ. VIII Italian 4 Anal. Mech.	Chemistry 4 Construction 10 Pol. Econ. VIII Italian IV Anal. Mech.	

NOTE.—Figures in brackets refer to sections of the classes. Roman numerals refer to courses in Academic Department.

THE GRADUATE SCHOOL

The affairs of the Graduate School are administered by a Dean, with an Advisory Committee of the University Faculty. The committee consists of the President and Dean, *ex-officio*, and Professors Brackett, Scott, Magie, Fine, Hibben, Harper, and Thompson. All inquiries should be addressed to Professor West, Dean of the Graduate School.

Immediately after the beginning of the Academic year, students entering the Graduate School, who are graduates of any approved institution other than Princeton University, or who, if graduates of Princeton University, have afterwards matriculated in some other university, meet according to announcement for matriculation.

Only graduates of Princeton and of other universities maintaining a similar standard for the bachelor's degree may be enrolled on their diplomas as graduate students.

Graduates of other universities and colleges may be admitted as graduate students only upon examination. They may, however, on presentation of their diplomas and other satisfactory credentials, be enrolled without examination as undergraduates in the class to enrolment in which their proficiency entitles them.

Each graduate student attending instruction regularly, and passing the examinations, is entitled to a certificate stating what he has done, signed by the President in behalf of the University.

Students by pursuing these courses may also qualify themselves for the degree of Master of Arts or Master of Science. The degree of Doctor of Philosophy, or Doctor

of Science, is conferred according to the regulations prescribed under the heading "Degrees."

All graduate students, except Fellows, shall pay the sum of five dollars for each course each term. The total maximum charge is not to exceed twenty dollars a term. Undergraduate courses of lectures or instruction are also open to graduate students, but undergraduates are not admitted to the graduate courses. Extra charges will be made for courses in analytical chemistry, the amount to depend on the nature of the course pursued.

All applications for enrolment should be made to the Dean of the Graduate School.

GRADUATE COURSES OF INSTRUCTION

The courses which are open to *graduate students only* are detailed in the list of courses offered in each department and are as follows :

MENTAL PHILOSOPHY

- 23 I. Negative Theories of Knowledge. First term [3]. (Given 1904-1905.) Lectures and readings. Professor Ormond.
- 24 I. Kant, Lotze, and Contemporaneous Philosophy. First term [3]. (Given 1903-1904.) Lectures, readings, and conferences. Professor Ormond.
- 24 II. Encyclopedia of Philosophy. Second term [3]. (Given 1903-1904.) Lectures and readings. Professor Ormond.
- 27, 28. Experimental Psychology. Laboratory course, consisting largely in research work, with weekly conference for original reports; open to all qualified graduate students. Both terms [3]. Professor Warren.
- 29, 30. Seminary in General Philosophy. Topic for the year: The Philosophy of Hermann Lotze. Conducted by reading, theses, and discussions. Both terms. Professor Ormond.

- 31, 32. Psychological Seminary. Topic to be determined in consultation with class. Limited to twelve men studying for advanced degrees; not given for less than five men. Both terms. Professor Baldwin or Professor Warren.
- 33. Theory of Mental Measurements. First term [3]. Professor Warren.
- 34. Reading in German Philosophy. Both terms [3]. Professor Hibben. *Hegel's Logik*.
- 35, 36. Ethical Seminary. Fundamental ethical concepts. Both terms [3]. Ex-President Patton, Professor G. S. Patton assisting.

JURISPRUDENCE AND POLITICS

- 8 I. The Private Law Orations of Cicero. (Latin 26 I.) Second term [3], alternating with 8 II. Professor Westcott.
- 8 II. Sources of Early Roman Law. (Latin 26 II.) Second term [3], alternating with 8 I. Professor Westcott.

POLITICAL ECONOMY AND SOCIOLOGY

- 9. Genesis of Industrial Order. An ethnological study of industry, including the earliest forms of the division of labor, the domestication of animals and plants, the rise of slavery, the use of money, etc. The class will meet in the Seminary room and the writing and criticism of theses will constitute the basis of the course. First term [3]. Professor Wyckoff. (Not given in 1903-1904.)
- 12. Advanced Economic Theory. An exposition of economic theory, historical and dogmatic. Seminary course for competent graduates, designed to supplement and continue course 9. Hours to be arranged with the instructor. Second term [3]. Professor Daniels.

ARCHÆOLOGY AND THE HISTORY OF ART

9. Greek Architecture. A reading knowledge of French or German will be required. First term [3]. Professor Marquand.
10. French Sculpture. A reading knowledge of French will be required. Second term [3]. Professor Marquand. (Not given 1903-1904.)
11. Early Christian Antiquities, from the beginning of Christianity to its triumph under Constantine, with especial study of the Roman Catacombs and their art, the first church buildings and the origin of liturgy. First term [3]. Professor Frothingham.
12. Christian Antiquities, from the fourth century to Charlemagne; the development of church buildings and liturgy, as well as of fresco and mosaic painting and other forms of art, especially with reference to art themes used for the instruction of the masses by the church. Second term [3]. Professor Frothingham.

ARCHITECTURE

- 5, 6. Christian Architecture. A practical study of ecclesiastical architecture from the fourth century to the twelfth, including the subjects of the construction, design, and details of the early Christian, Byzantine, and Romanesque periods. Requires elementary knowledge of the history of Christian art and Mediæval history, and ability to read French. Both terms [3]. Mr. Butler.

SEMITICS

- 3, 4. Advanced Arabic. Interpretation of the more difficult texts; reading of manuscripts and inscriptions. Both terms [2]. Dr. Littmann. *Noeldeke-Müller: Delectus Veterum carminum Arabicorum*; *Imdd ad-Dīn: Conquest of Syria and Palestine by Saladin* (Ed. Landberg)

- 5, 6. Ethiopic. Outline of the history of Ethiopic literature, with interpretation of selections from different works, and reading of manuscripts. Both terms [2]. Dr. Littmann.
7. Semitic Epigraphy. Interpretation of Phoenician, Palmyræan, Nabatæan or South Arabian inscriptions. First term [2]. Dr. Littmann. *Lidsbarski*: Handbuch der Nordsemitischen Epigraphik; *Hommel*: Südarabische Chrestomathie.
8. Advanced Syriac. Interpretation of a text from *Land*: Anecdota Syriaca. Second term [2]. Dr. Littmann.

Courses on other Semitic languages and their literature, and in addition on Coptic and Turkish, may be given if desired.

INDO-IRANIAN

- 3, 4. Advanced Sanskrit. Reading of classical and Vedic Sanskrit in the first and second terms. Both terms [2]. Professor Winans or Professor Robbins. *Windisch*: Zwölf Hymen des Rig Veda; or *Peterson*: Handbook to the Study of the Rig Veda, part II.
- 5, 6. Avesta. Grammar and reading of selected texts. Both terms [2]. Professor Robbins. *Jackson*: Avesta Grammar, Avesta Reader, first series; *Geldner*: Avesta; *Mills*: Gâthâs.

GREEK

19. Aristophanes: selected plays. First term [3]. Professor Robbins.
20. Historical Latin and Greek Grammar. Phonology and morphology. Lectures and reading. Second term [3]. Professor Robbins. *Brugmann*, *Hirt*, *Meyer*, *Stolz*, *Lindsay*.

21. Greek Inscriptions. General introduction; the alphabet; historical inscriptions of the fifth century; inscriptions relating to economics and finance. First term [3]. Professor Prentice.
22. Symposiums of Xenophon and Plato, with studies in textual criticism. Second term [3]. Professor Winans.

LATIN

- 21, 22. Mediæval Latin Literature. A course involving the extensive reading of representative writers and of the history of Mediæval Latin literature. Both terms [3]. Dean West.
- 26 I. (Jur. and Pol. 8 I.) Law Orations of Cicero, with a study of the legal institutions of his time. Second term [3], alternating with 26 II. Professor Westcott.
- 26 II. (Jur. and Pol. 8 II.) Sources of Early Roman Law. Second term [3], alternating with 26 I. Professor Westcott. *Bruns*: *Fontes Juris Romani Antiqui*; *Lindsay*: *Latin Inscriptions*.
28. Tacitus. Second term [3]. Professor Westcott.
32. Introduction to the Study of Mythology. Lectures and theses. Second term [3]. Professor Carter.
34. Method of Palæography and Text-Criticism. Seminary: lectures and drill in text-making—search for MSS., collation, formation of genealogies and construction of text. Second term [3]. Dr. Richardson.

ENGLISH

23. Shakespeare: The Doubtful Plays. A study of the text and the authorship. First term [3]. Professor Parrott.
25. Gothic. First term [3]. Professor Hunt. *Wright*: *Gothic Primer*.

GERMAN

15. Middle High German. Grammar, lectures, and reading. The course is designed both to furnish a foundation for the historical study of Modern German and to serve as an introduction to the study of Germanic philology. Proficiency in Modern German is required. First term [3], given 1902-1903. Professor Hoskins. *Paul*: Mittelhochdeutsche Grammatik; *Michels*: Mittelhochdeutsches Elementarbuch; *Weinhold*: Mittelhochdeutsches Lesebuch.
16. Old High German. Grammar, reading, and lectures on the historical development of the German language. Knowledge of modern German and middle high German required, and some knowledge of Gothic, useful. Second term [3]. Professor Hoskins. *Braune*: Althochdeutsches Lesebuch; *Braune*: Althochdeutsches Grammatik.
17. Historical German Grammar. Introduction, phonology, morphology. Requires a knowledge of Gothic, old and middle High German. First term [3]. Professor Hoskins. Lectures. References to *Paul*: Grundriss der Germanischen Philologie; *Streitberg*: Urgermanische Grammatik.
18. Old Icelandic. Grammar, lectures, and reading. For advanced students. Second term [3]. Professor Hoskins. *Norreen*: Altisländische und Altnorwegische Grammatik; *Kahle*: Altisländisches Elementarbuch; *Ranisch*: Die Volsungasaga.

FRENCH

- 17, 18. Molière. A study of Molière's life, evolution, social satire, influence, and imitators. Both terms [3]. Professor A. G. Cameron.

- 19, 20. Old French Philology. Both terms [3]. Professor Lewis. Lectures on old French etymology, morphology, and syntax.

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MATHEMATICS

21. Theory of Substitutions. First term [2]. Dr. Gillespie.
22. Theory of Invariants. Second term [2]. Dr. Gillespie.
23. Theory of Functions of a Complex Variable. Advanced course. First term [2]. Professor Fine.
24. Theory of Ordinary Differential Equations. Second term [2]. Professor Fine.
26. Elliptic Functions. Second term [2]. Mr. A. H. Wilson.
28. Partial Differential Equations. Second term [2]. Professor Lovett. *Goursat*.
29, 30. Lie's Transformation Groups, with Applications to Differential Equations and Geometry. Both terms [2]. Professor Lovett.
31. Infinitesimal Geometry. First term [2]. Professor Thompson.
32. Finite and Infinitesimal Deformations of Surfaces. Second term [2]. Dr. Eisenhart.
34. Congruences and Complexes. Second term [2]. Dr. Eisenhart.
35, 36. Special Topics in Metrical Geometry. Historical readings of some of the memoirs of Monge, Dupin, Gauss, Weingarten, Darboux, and Bianchi. Both terms [2]. Professor Thompson.
38. The Differential Equations of Mechanics, in particular their periodic solutions. Second term [2]. Professor Lovett.
40. Analytical Mechanics. Second term [2]. Professor Lovett.
41, 42. Special Topics in Mechanics. Historical readings. Both terms [2]. Professor Lovett.

ASTRONOMY

- 7, 8. Celestial Mechanics. Lectures and collateral reading. Both terms [2]. Professor Lovett.
- 9, 10. Theoretical Astronomy and the calculation of orbits. Both terms [2]. Professor Young. *Watson*: Theoretical Astronomy; *Oppolzer*: Bahnbestimmung; *Klinkerfues*: Theoretische Astronomie.
- 11, 12. Practical Astronomy (extended course). Special subjects more thoroughly developed than in courses 5, 6. Both terms [3]. Professor Reed. *Chauvenet*: Practical Astronomy.

PHYSICS

- 13, 14. Theory of Electricity. Both terms [3]. Professor Brackett. First term; *Duhem*: L'Electricité et le Magnétisme. Second term; *Drude*: Die Physik des Aethers.
- 15, 16. Absolute measurements in Electricity and Magnetism. Both terms [4-6]. Professor McClenahan. *Gray*.
- 17, 18. Laboratory practice in Physics. Both terms [3]. Professor McClenahan.
20. Theory of Heat. Second term [3]. Professor Magie.
21. Elasticity. First term [3]. Professor Loomis.
22. Chemical Physics. Second term [3]. Professor Loomis.
- 23, 24. Theory and Practice of Exact Measurements. Both terms [3]. Professor Loomis.
- 25, 26. Research work in Physics. Both terms. Number of hours indefinite. Professors Magie and Loomis.

The Physical Laboratory is open throughout the week to graduate students.

GEOLOGY

7. Economic Geology. First term [3]. Dr. Farr.

BIOLOGY

- 23, 24. Cytology, Histogenesis, and Comparative Histology. Lectures and the practical study of the cell and its organs. Comparative studies of several tissues. Histogenesis, repair and regeneration of the tissues. Methods of research and thesis work. Professor Dahlgren. Both terms [3]. A fee of \$25 is charged for apparatus and reagents.
- 25, 26. Systematic Botany of the Vascular Plants. Both terms [3]. Professor Macloskie.
- 27, 28. The Morphology and Phylogeny of the organ systems of vertebrates. Research course. Both terms [3]. Professor McClure.
- 29, 30. Comparative Morphology of the Invertebrates. Both terms [3]. Professor Rankin.
31. Paleontology of Mammals. First term [3]. Professor Scott.
32. Paleontology. The morphology and phylogeny of living and extinct vertebrates other than mammals. Second term [3]. Dr. Farr.

An advanced course in biology has been established in connection with the geological, zoological, botanical and chemical departments, the objects in view being: (1) to foster a spirit of original research; (2) to qualify advanced students to become teachers. This course is open to graduates, also to students presenting diplomas from recognized medical schools.

It is not restricted to students who are candidates for a degree, if the applicants possess sufficient elementary knowledge to profit by the instruction.

This course is of a comprehensive and elastic character, and according to the requirements and wishes of different students, includes much laboratory work under the direction of the instructor. At the close of the first term, the student may select a department of special study for his thesis, which must present the results of original work.

DIRECTORS OF THE SEMINARIES

1903-1904

Philosophical Seminary

Professor Hibben.

Economic Seminary

Professor Daniels.

Seminary in Archaeology and Ancient Art

Professor Frothingham.

Classical Seminary

Dean West.

English Seminary

Professor Parrott.

Romance Seminary

Professor Lewis.

Mathematical Seminary

Professor Thompson.

DEGREES

The following degrees are given for graduate study:
Master of Arts, Master of Science, Doctor of Philosophy
and Doctor of Science.

MASTER OF ARTS (A. M.)

The degree of Master of Arts may be conferred only
upon a Bachelor of Arts of this or any approved institution
who shall have devoted one year exclusively to graduate

study in the University under the care of the Faculty, passing examinations upon the studies pursued; or shall have taken graduate courses involving at least two hours a week each term for four terms and passed satisfactory examinations upon these courses, and such extra reading as may be assigned. The degree may also be conferred upon a Bachelor of Arts of this University who shall have submitted to the Faculty a satisfactory dissertation, ordinarily of not less than five thousand words, on some literary, philosophical, or scientific subject previously approved by the Faculty, in April, not earlier than the third year after graduation. The fee for this degree is ten dollars, to be paid to the University Treasurer either before the candidate enters his last examinations, or else when his dissertation is handed in.

Every resident candidate shall announce to the Faculty, at least eight months before the degree can be conferred, the subjects which he intends to offer for examination. These subjects will be such as to form a consistent and well co-ordinated body of studies, and shall be subject to the approval of the Faculty.

MASTER OF SCIENCE (M. S.)

The degree of Master of Science may be conferred upon a Bachelor of Science of this or of any approved institution who shall have devoted one year exclusively to graduate study in the University under the care of the Faculty, passing examinations upon the studies pursued; or shall have taken graduate courses involving at least two hours a week each term for four terms and passed satisfactory examinations upon these courses, and such extra reading as may be assigned. The degree may also be conferred upon a Bachelor of Science of this University who shall have submitted to the Faculty a satisfactory dissertation, ordinarily of not less than five thousand words, on some literary, philosophical, or scientific subject, previously approved by the Faculty,

in April, not earlier than the third year after graduation. The fee for this degree is ten dollars, to be paid to the University Treasurer either before the candidate enters his last examinations, or else when his dissertation is handed in.

Every resident candidate shall announce to the Faculty, at least eight months before the degree can be conferred, the subjects which he intends to offer for examination. These subjects shall be such as to form a consistent and well co-ordinated body of studies, and shall be subject to the approval of the Faculty.

Any Bachelor of Arts who satisfies the Faculty that he has had adequate training in science may become a candidate for the degree of Master of Science on the same conditions as a Bachelor of Science.

DEGREE OF DOCTOR OF PHILOSOPHY (PH.D.) IN PRINCETON UNIVERSITY

Subject to the regulations hereinafter stated, the degree of Doctor of Philosophy may be conferred upon any Bachelor of Arts of Princeton University, or of any approved institution whose academic course is equivalent to that pursued in Princeton, provided he has spent at least two years in exclusive study for the degree. One of the two years must be spent in Princeton, and the other either at Princeton or some other approved university.

Applications for enrolment as candidates from those who hold some other Bachelor's degree than that in Arts, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in exceptional cases.

Regulations

I. *The Preliminary Examination.*—Every applicant before enrolment as a candidate for the Doctor's degree must pass

an examination in Princeton on the first Wednesday following the opening of the academic year in September.

All applicants are examined on their ability to read ordinary French and German with a fluency sufficient to ensure their use as instruments of advanced study. They are also examined in the group of subjects connected with the general department of their proposed studies as detailed below:

A. In the Department of Philosophy: Ability to read Latin with a fluency sufficient to ensure its use as an instrument of advanced study; general psychology and logic; history of philosophy, ancient and modern; outlines of general history.

B. In the Department of Language and Literature: Outlines of general history; general knowledge of the English language and literature; ability to read Greek and Latin with a fluency sufficient to ensure their use as instruments of advanced study.

C. In one of the following six groups in the Department of Mathematics and Science:

1. In Mathematics: Elementary mathematics, including trigonometry, analytical geometry, the elements of the theory of equations, and the differential and integral calculus.

2. In Astronomy: Elementary mathematics, including trigonometry and analytical geometry; general astronomy; general physics.

3. In Physics: Elementary mathematics, including trigonometry and analytical geometry; general physics.

4. In Chemistry: General chemistry; general physics.

5. In Geology and Physical Geography: Elements of geology, zoology and botany; general chemistry.

6. In Biology: Elements of zoology and botany; general chemistry.

II. *Chief Subject of Study.*—Every candidate, after passing his preliminary examination and before entering on his studies for the Doctor's degree, shall announce which one

of the subjects in the appended list he selects as his chief subject, and shall thereupon present to the Committee on the Graduate Department for their approval a statement of the said chief subject to which he intends devoting himself while a candidate, with such fulness of explanation as the committee may require.

A. Department of Philosophy: Logic, psychology, ethics, metaphysics, history of philosophy, philosophy of religion, history, political economy, science of politics, jurisprudence, archæology and art.

B. Department of Language and Literature: Sanskrit, Greek, Latin, French, German, Italian, English (including old English).

C. Department of Mathematics and Science: Mathematics, astronomy, physics, chemistry, geology and physical geography, biology.

III. *The Subsidiary Subjects.*—In addition to the chief subject the candidate shall select two suitable subsidiary subjects and announce them to his examiners at some time in the first year of his course. One of these must be logic, psychology, ethics, or the history of philosophy, unless the candidate has chosen for his chief subject any one of those just named or else passes a satisfactory special examination on some one of them before entering upon his course as a candidate. The subsidiary subjects should be cognate to the chief subject, but not included under it, and with this restriction any study enumerated in the lists of chief subjects may be taken, as well as the following which are not thus enumerated: physiological psychology, pedagogics.

IV. *The Thesis.*—The candidate shall present a thesis on some special topic in the department which constitutes his chief subject at least four months before the degree can be granted. The thesis is not ordinarily to exceed twenty thousand words in length, and shall not be accepted unless it contains evidence of thorough scholarship and ability to

pursue original research, and, if accepted, it must be published by the candidate before the degree can be conferred. If the thesis is not accepted, the candidate will not be admitted to the final examination.

V. *The Final Examination.*—After the thesis has been accepted the candidate may proceed to his final examination at a time appointed by the Committee on the Graduate Department. This examination in the chief and subsidiary subjects is to be conducted orally in the presence of the Faculty and cannot be divided. In the chief subject, however, there may be a written examination in addition to the oral, if the examiner so requires. The candidate will be examined on his general knowledge of the chief subject, and will be expected to show in addition a minute and complete acquaintance with some one principal part of it.

VI. *The Conferring of the Degree.*—Candidates who pass the final examination are ordinarily recommended to the Trustees for the Doctor's degree, and if the Trustees adopt the recommendation, the degree is publicly conferred by the President at the annual Commencement in June. The degree of Doctor of Philosophy carries with it that of Master of Arts.

VII. *Fees.*—Those who apply for the degree shall pay the University Treasurer a fee of sixty dollars, in two installments of thirty dollars, the first to be paid when the candidate is enrolled and the second when he sends in his thesis.

DEGREE OF DOCTOR OF SCIENCE (D.Sc.) IN PRINCETON UNIVERSITY

Subject to the regulations hereinafter stated, the degree of Doctor of Science may be conferred upon any Bachelor of Science of Princeton University, or of any approved college or scientific school whose course is equivalent to that pursued in Princeton, provided he has spent at least two

years in exclusive study for the degree. One of the two years must be spent in Princeton, and the other either at Princeton or some other approved university.

Application for enrolment as candidates from those who hold some other Bachelor's degree than that in Science, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in exceptional cases.

I. *The Preliminary Examination.*—Every applicant before enrolment as a candidate for the Doctor's degree must pass an examination in Princeton on the first Wednesday following the opening of the Academic year of the University in September.

All applicants are examined on their ability to read ordinary French and German with a fluency sufficient to ensure their use as instruments of advanced study and research.

They are also examined in the particular group of subjects connected with the subject of their proposed studies, as detailed below:

1. Mathematics: Elementary mathematics, including trigonometry, analytical geometry, the elements of the theory of equations, and of the differential and integral calculus.

2. Astronomy: Elementary mathematics, including trigonometry, analytical geometry, and the elements of the differential and integral calculus, general astronomy, general physics.

3. Physics: Elementary mathematics, including trigonometry, analytical geometry, and the elements of the differential and integral calculus, general physics, general chemistry.

4. Chemistry: General chemistry, general physics.

5. Mineralogy: Elements (including crystallography), general chemistry, general physics.

6. Geology and physical geography; elements of geology, zoology and botany, general chemistry.

7. Biology: Elements of zoology and botany, general chemistry.

II. *Chief Subject of Study*.—After passing the preliminary examination every candidate shall announce which of the following departments he selects for his chief subject of study:

1. Mathematics: Including higher differential and integral calculus; differential equations; geometry (conics, higher plane curves, geometry of three dimensions); theory of functions, elliptic functions, analytical mechanics. In the final examination the candidate will also be tested with reference to his ability to make a computation with reasonable skill and accuracy. This will be necessary only where the candidate has had no satisfactory laboratory or observatory work.

2. Astronomy: Including either practical astronomy and theory of observations, or computation of orbits and ephemerides.

3. Physics.

4. Chemistry: A portion of the time will be required for the study of qualitative and quantitative chemistry, unless the candidate is already sufficiently proficient in these branches.

5. Mineralogy.

6. Geology and Physical Geography: Including either practical and engineering geology, with field work, or application of paleontology to determinations of formations, or physical geography.

7. Biology: Including the morphology, histology, and embryology of some one class of animals or plants; physiology; histological methods and practice; animal embryology; modes of reproduction of plants.

III. *The Subsidiary Subjects*.—In addition to the chief subject the candidate shall select two suitable subsidiary subjects and announce them to his examiners at some time

in the first year of his course. The subsidiary subjects should be cognate to the chief subject, but not included under it, and with this restriction any study enumerated in the lists of chief subjects may be taken.

IV. *The Thesis*.—The candidate shall present a thesis on some special topic in the department which constitutes his chief subject at least four months before the degree can be granted. The thesis is not ordinarily to exceed twenty thousand words in length, and shall not be accepted unless it contains evidence of thorough scholarship and ability to pursue original research, and, if accepted, it must be published by the candidate before the degree can be conferred. If the thesis is not accepted, the candidate will not be admitted to the final examination.

V. *The Final Examination*.—After the thesis has been accepted the candidate may proceed to his final examination at a time appointed by the Committee on the Graduate Department. This examination in the chief and subsidiary subjects is to be conducted orally in the presence of the faculty and cannot be divided. In the chief subject, however, there may be a written examination in addition to the oral, if the examiner so requires. The candidate will be examined on his general knowledge of the chief subject, and will be expected to show in addition a minute and complete acquaintance with some one principal part of it.

VI. *The Conferring of the Degree*.—Candidates who pass the final examination are ordinarily recommended to the Trustees for the Doctor's degree, and if the Trustees adopt the recommendation, the degree is publicly conferred by the President at the annual commencement in June. The degree of Doctor of Science carries with it that of Master of Science.

VII. *Fees*.—Those who apply for the degree shall pay the University Treasurer a fee of sixty dollars, in two installments, the first to be paid when the candidate is enrolled and the second when he sends in his thesis.

ACADEMIC COSTUME

The regular academic costume, characteristic of the preceding degrees, and appropriate for official academic occasions and official appearances in public, consists of three parts: the gown, the hood, and the cap. With respect to each of these parts certain things are prescribed, in conformity with similar rules prescribed by other universities after a general conference. These regulations, given below, arrange a scheme which makes the academic costume a plain badge of the grade of the degree, of the faculty to which the degree pertains, and of the institution granting the degree.

GOWN.—The *pattern* is that fixed by custom, with pointed sleeves for the bachelor's degree, with long closed sleeves for the master's degree, and with round open sleeves for the doctor's degree. The *material* shall be worsted stuff for the bachelor's degree, silk for the master's and doctor's degrees. The *color* shall be black. *Trimmings*: for the bachelor's and master's degree the gown shall be untrimmed; for the doctor's degree the gowns shall be faced all the way down the front with black velvet, with bars of the same across the sleeves; or the facings and crossbars may be of velvet of the same color as the edging of the hood, given below, being distinctive of the faculty to which the degree pertains. The facing is about three inches wide, the crossbars are three in number, on the outside front of each sleeve, and are about an inch wide and three inches apart.

HOOD.—The *pattern* is that fixed by custom. The *material*, the same as that of the gown (worsted for bachelors, silk for masters and doctors). The *color* of the outside, black. The *lining* (which is distinctive of the institution granting the degree) orange and black—the official colors of Princeton. It is the custom to have a black chevron upon an orange background. The *length* and *form* as follows: for the bachelor's degree the length shall be three-

fourths that for the master's degree; for the master's degree the length is that fixed by custom, not exceeding four feet; that for the doctor's degree is of the same length, but shall have panels at the sides. It is the practice to have the panels edged with the color of the lining. The *trimmings*, binding, or edging (on the outside of the hood where it opens at the top), not more than six inches in width (two for bachelors, three for masters, five for doctors), shall be of silk, satin, or velvet (velvet by custom); the color to be distinctive of the faculty to which the degree pertains, thus:

White—Faculty of Arts and Letters (A.B., A.M., Litt.D. or L.H.D.)

Scarlet—Faculty of Theology (B.D., D.D., S.T.D.)

Purple—Faculty of Law (LL.B., LL.D., J.U.D., D.C.L.)

Green—Faculty of Medicine (M.D.)

Dark Blue—Faculty of Philosophy (Ph.B., Ph.D.)

Gold Yellow—Faculty of Science (B.S., C.E., E.E., M.S., D.Sc.)

Brown—Faculty of Fine Arts.

Pink—Faculty of Music (Mus.B., Mus.D.)

CAP.—The cap is of the material and form fixed by custom, commonly called a trencher cap or mortar-board. The color shall be black. The doctor's cap may be of velvet. Each cap shall be ornamented with a long tassel attached to the middle of the top. The tassel of the doctor's cap may be, in whole or in part, of gold thread.

FELLOWSHIPS

I. UNIVERSITY FELLOWSHIPS

These fellowships were founded by subscription and endowment and were intended by the founders to encourage study and promote original research in the several depart-

ments to which they are assigned. They are distinguished from the competitive fellowships by being open to the graduates of any American college, while the appointments are made, not by competitive examination, but by a comparison of the records presented by the applicants as to their previous collegiate standing, capacity, and character.

The fellowships are subject to the following regulations:

1. The fellowships are to be held for one year, but in cases of special merit they may be continued for a longer period by recommendation of the department and sanction of the Faculty.

2. The candidates shall be graduates of not more than five years' standing of an accredited American college. An application should be accompanied with evidence of the qualifications of the applicant to pursue an independent course of study and investigation in the department concerned.

3. Appointment shall be made by the Faculty upon recommendation of the Professors in the department interested, and shall be announced at Commencement.

4. All applications must be in the hands of the Dean of the Graduate School of the University on or before April 15th, the appointees to hold their positions for a year from the following September.

It is deemed essential to the development of the Graduate Department that the number of these fellowships should be largely increased. The following have already been founded:

J. S. K. MATHEMATICAL FELLOWSHIP FUND

This fund was founded in 1873 by a resident of New York City, who gave \$11,000 for the purpose. Through accumulations of interest it now amounts to \$16,500. In accordance with the deed of gift, "the income from this fund is to be devoted exclusively to fellowship purposes in the department of mathematics."

One fellow in mathematics will be appointed each year. Frequently a second fellow may be appointed. Appointments will be made on the basis of the records presented by the applicants as to their previous collegiate standing, capacity, and character. In addition, in the case of resident students, a competitive examination may be held in June on geometry, differential equations, and the theory of functions.

**SOUTH EAST CLUB UNIVERSITY FELLOWSHIP IN SOCIAL
SCIENCE**

This fellowship, which pays to the holder \$500 per annum, was founded by alumni of the classes of '76, '77, '78 and '79—former residents of the South Entry of East College.

CLASS OF 1877 UNIVERSITY FELLOWSHIP IN BIOLOGY
This fellowship pays to the holder \$400 per annum.

**CHARLES SCRIBNER UNIVERSITY FELLOWSHIP IN ENGLISH
LITERATURE**

This fellowship, which yields the holder \$500 per annum, was founded in memory of Charles Scribner by his son, Mr. Charles Scribner, of the Class of 1875.

UNIVERSITY FELLOWSHIP IN ARCHÆOLOGY

This fellowship pays to the holder \$400 per annum.

THAW FELLOWSHIP IN ASTRONOMY

This fellowship, which pays to the holder the income of \$10,000, was founded by Mrs. Thaw of Pittsburg.

JOHN HARDING PAGE CLASSICAL FELLOWSHIP

This fellowship was established in 1900 by Mrs. James Laughlin, Jr., as a memorial to her father, Mr. John Harding Page. It is conferred by appointment of the Faculty and pays the holder the sum of \$600.

FRANCIS HINTON MAULE BIOLOGICAL FELLOWSHIP

This fellowship was founded in 1901 by Mr. and Mrs. Francis I. Maule as a memorial of their son, Francis Hinton Maule, who was a student in the University during the years 1895-98. It is conferred by appointment of the Faculty and pays the holder the income of \$10,000.

II. COLLEGE FELLOWSHIPS

Besides the degrees and honors conferred in the regular course, annual fellowships, competitive scholarships, and prizes are offered as special incentives to study, in the classes or departments with which they are connected.

Only matriculated students who are candidates for a degree are admitted to the competition for these fellowships, prizes, and scholarships, and no one is admitted to such competition who has failed to pass satisfactorily his last preceding examination in any of the departments.

No member of any class is allowed to compete for more than one of the fellowships or scholarships offered to that class.

The names of the fellows, scholars, and prizemen of each year are included in the Honor List for the year.

The funds for the competitive fellowships, prizes, and scholarships are special gifts, and the income is appropriated according to the specific instructions of the donor. They do not belong to the general funds of the University.

Every competitor must have been a member of the University in full standing for at least two academic years previous to the fellowship examinations.

No student whose final rank for scholarship is below the second general group can be a competitor for any fellowship; and no student can be a competitor for the fellowship in any particular department whose average rank for the last two years of his course is below the first group in that department.

Every Fellow obtaining one of the competitive fellowships, the income of which is over \$400, must devote his whole time for one year to study in the department for which the fellowship is provided, under the direction of the Professors in that department. He must reside in Princeton, and pass two rigid examinations on his work, unless by a vote of the Faculty he be allowed to study at an approved foreign university, in which case he shall from time to time furnish written reports of his work to the Professors in his department. The result of every examination and the reports of work done abroad shall be immediately reported to the Faculty. Any Fellow resident in Princeton shall, when called upon, perform such duties in the department to which he belongs as may be assigned to him by the President at the request of the Professors in that department. Any Fellow may be allowed to occupy free of cost in one of the University buildings a room assigned to him by the University authorities, and while occupying such room he shall be regarded as a resident officer of the University, and shall perform such duties in preserving order and decorum in the University edifices as the President and Dean may assign.

CHANCELLOR GREEN MENTAL SCIENCE FELLOWSHIP

This fellowship, originally founded in 1870 upon the annual payment of \$600 by the late Chancellor Henry W. Green, was permanently endowed in 1878 by a gift of \$10,000 by his widow.

The income of this fund, at the current rate of interest, to be paid quarterly, will be awarded to that member of the Senior class who shall write the best essay on a subject to be assigned by the department of philosophy (to be given in on or before June 1), and who shall stand highest at a special examination to be held in June.

The examination will include the philosophies of Plato, Aristotle, Descartes, Locke, Leibnitz, Hume, Reid, and

Kant; also theoretical ethics, metaphysics, psychology, and inductive logic.

CLASS OF 1860 EXPERIMENTAL SCIENCE FELLOWSHIP

This fellowship was founded in 1870 upon the sum of \$10,000 subscribed by the Class of 1860. A deficiency of income, resulting from the depreciation of the value of the securities in which the principal was invested and the lowering of the rate of interest, is paid by the consent of the donor, from the income of the Magee Professorship of Mining and Engineering, founded by George J. Magee, Esq., of the Class of 1860.

The income of the fund, to be paid quarterly, will be awarded to that member of the Senior class who shall stand highest at special examinations, to be held in May or June, on the following subjects, viz: 1. Theory of heat. 2. Outlines of theoretical chemistry. 3. The subjects in geology may be learned on application to the Professor of Geology.

BOUDINOT FELLOWSHIPS

These fellowships are founded in part upon a bequest of Dr. Elias Boudinot, of New Jersey.

THE HISTORICAL FELLOWSHIP.—The sum of \$200 per annum, to be paid quarterly, will be given to the holder of the fellowship, who shall be appointed by the Faculty, upon the nomination of the President and the Professor or Professors of history, for any period not exceeding three years, on condition that he reside in Princeton and devote his whole time to historical research; that he deliver such lectures and conduct such exercises as the President and Professor or Professors of history shall direct, and that he perform such other duties as may be assigned him in accordance with the general regulations respecting the duties of resident Fellows.

THE MODERN LANGUAGE FELLOWSHIP.—Candidates for this fellowship must have completed the French and German courses of Junior and Senior years, amounting to at least two hours a week in each subject for both terms of both years. The sum of \$200, to be paid quarterly, will be awarded to that member of the Senior class who shall pass the best examination in June on the following subjects:

In German—Translation from English into German; the reading at sight of German prose, historical and literary; history of German literature; *Behaghel's*: Die deutsche sprache.

In French—Translation from English into French; a knowledge of historical French Grammar; the history of French literature; and work in Molière's plays, portions of Pascal, Madame de Sévigné, Voltaire, and Victor Hugo, to be assigned upon application. An essay of not less than four pages (foolscap) in either French or German.

The Fellow shall from time to time during the following year, as may be required by the Professors of Modern Languages, give evidence by papers that he is reading such a course as the Professors may approve.

THE E. M. BIOLOGICAL FELLOWSHIP

This fellowship will be awarded after a competitive examination on subjects assigned by the Professors of the biological department.

The competition for this fellowship will be open to any member of the Senior class in either the Academic or Scientific department, or to any college graduate who shall have pursued during the preceding year the university course in biology at Princeton, and who shall, in the opinion of the examiners, be deemed competent to pursue the subject advantageously.

This fellowship conveys the use of a table in the National Seaside Laboratory at Woods Holl, Mass., together with all the facilities afforded for the collection and study of animal

life during the season favorable for such investigations. In the winter months following this laboratory work the Fellow will pursue his studies at Princeton, and will be required to prepare and submit a thesis embodying the results of his summer researches.

The examination for this fellowship in 1904 will be held in June upon the following subjects:

1. Life-history of higher cryptogams and gymnosperms.
2. Anatomy and embryology of mollusca.
3. Anatomy and embryology of the teleosts and selacians.
4. The histology of the nervous system.

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1700

PART IV

**GROUND AND BUILDINGS AND INSTITU-
TIONS CONNECTED WITH THE
UNIVERSITY**

GROUNDS AND BUILDINGS

During the first decade of its existence, the College of New Jersey owned neither grounds nor buildings. The College exercises were held either in the house of the President or in convenient rooms.

From the beginning, however, it had been the purpose of the Trustees to erect college edifices in a central part of the State and there locate the institution permanently. In accordance with this plan it was voted by them on May 15, 1751, that the necessary buildings should be erected at New Brunswick, provided the citizens of that place secured to the College the sum of one thousand pounds proclamation money, two hundred acres of woodland and ten acres of cleared land. An offer of these terms was also made by the inhabitants of Princeton at the same meeting of the Trustees, and when, in September, 1752, it was learned that New Brunswick had not complied with the required terms, the Princeton offer was formally accepted. The particular tract of ground which became the site of Nassau Hall was donated by Nathaniel Fitz Randolph, and the money guarantee was furnished by Messrs. John Stockton, Thomas Leonard, and John Horner, all wealthy residents of the village.

The University campus now consists roughly of two hundred and twenty-five acres, forming a quadrangle bounded by Nassau street on the north, Washington street on the east, Stony Brook on the south, and the line of the Pennsylvania Railroad on the west. East of and adjoining the

campus lies the Olden farm of one hundred and six acres, held in trust for the University, and on the west the Princeton golf links, covering two hundred and twenty-five acres.

The Academic lectures and recitations are conducted mainly in Dickinson Hall and in the east end of Nassau Hall, while the Scientific lecture rooms and laboratories are principally in the building of the John C. Green School of Science, and in the Biological Laboratory presented by the Class of 1877. The Museum of Historical Art, the central part of which has been completed, will contain the lecture rooms for the courses in art and archæology. The special instruction in the department of Electrical Engineering is carried on mainly in the Magnetic Observatory, and the Chemical Laboratory provides the class-rooms and laboratories of the departments of chemistry and mineralogy.

NASSAU HALL

Nassau Hall, the oldest and historically the most interesting building on college property, is picturesquely situated on the most elevated point of the front campus. At the time of its completion in the autumn of 1756, it was the largest academic building in the country. It was designed by Robert Smith, of Philadelphia, and was built of reddish gray sandstone quarried in the neighborhood, and now covered with ivy. In its three stories and basement it formerly contained, exclusive of the prayer hall or chapel, which occupied the central portion of the building, sixty rooms which included refectory, library, and recitation rooms. It was named Nassau Hall in honor of William of Nassau, Prince of Orange, William III of England. During the Revolution it served at different times as hospital and barracks for American and British troops; and here from June to November, 1783, the Continental Congress sat.

Remodellings of the interior, consequent upon two disastrous fires in the last century, have strikingly altered the

arrangement of the building. The upper floor contains the Histological Laboratory and the Laboratory of Experimental Psychology; on the second floor may be found the Department Library of Geology and Paleontology and the office of the Curator of the E. M. Museum, while the first floor is occupied by the Paleontological Laboratory and the Geological lecture room. On this floor, too, is the E. M. Museum and the University's collection of portraits of presidents, officers, and benefactors of the college, together with the Peale portrait of Washington. The Museum is open daily except Sundays.

THE DEAN'S HOUSE

A house for the president of the college was erected in 1756, and until 1879, when Prospect was acquired by the Trustees, it continued to be the presidential residence.

Since the institution of the Deanship the house has been the official residence of the Dean of the University.

THE UNIVERSITY OFFICES

In 1803 a substantial stone building containing recitation rooms, a library room and apartments for the two literary societies of the College, the Cliosophic and the American Whig, was erected west of Nassau Hall. This building is now used as the executive headquarters of the University, and contains the Office of the Treasurer, the Office of the Registrar, the Office of the Curator of Grounds and Buildings, and the Faculty Room.

PROSPECT

Prospect, the official residence of the President of Princeton University, is one of the oldest estates in the town, although it was not acquired by the University until 1879. The mansion, erected in 1849, is beautifully situated in extensive grounds, the main entrance opening on McCosh Walk.

DORMITORIES

WEST COLLEGE

After Nassau Hall, West College, built in 1836, is the oldest dormitory building still standing. It forms the western side of the central quadrangle and contains forty suites of rooms.

REUNION HALL

Reunion Hall, erected in 1870, on the site of Professor Joseph Henry's residence, between West College and the University Offices, was so named to commemorate the reunion of the Old and New Schools of the Presbyterian Church. Prominent members of each party donated the funds by which it was built, and its cornerstone was laid by the General Assembly. Contrary to the usual method, this building is heated by steam throughout. It contains fifty-four suites.

WITHERSPOON HALL

Witherspoon Hall, named after the president of Revolutionary days, the Signer of the Declaration of Independence, was built in 1877 for the purpose of affording more modern and comfortable rooms than had previously been considered necessary. It contains sixty suites. Built of brownstone and blue gray stone with brownstone trimmings in the Victorian Gothic style, it towers above the neighboring buildings on the western section of the campus and forms the north side of the quadrangle enclosed by Edwards and Stafford Little Halls.

EDWARDS HALL

Edwards Hall, a brownstone Gothic building, is named after President Jonathan Edwards and contains eighty-four rooms. It was erected in 1880.

ALBERT B. DOD HALL

Albert B. Dod Hall, the gift of Mrs. David Brown, of Princeton, was erected in 1890 in memory of her brother, Professor Albert Baldwin Dod, of the class of 1822. It is a long massive structure in Italian style, the body stone of granite with trimmings of Indiana limestone, while the columns flanking the entrance are of Georgia marble. The small amount of carving over the main entrance is Byzantine. The building has accommodation for one hundred students.

DAVID BROWN HALL

David Brown Hall, a dormitory of fifty suites, is another gift from Mrs. Brown; it was erected in 1891 in memory of her husband. It is modeled after a Florentine palace in the Italian Renaissance style, and forms a hollow square of four stories enclosing a courtyard 67 by 44 feet. The first two stories are of granite, the two upper stories Pompeian brick. A granite seat runs the length of the front façade. This dormitory is situated at the edge of Prospect gardens and overlooks the long slope down to the Stony Brook valley and the landscape beyond.

BLAIR HALL

Blair Hall, a Sequicentennial gift from the late Hon. John Insley Blair, was the first representative of the style of architecture which has since been adopted for the later Princeton buildings. The style is the English collegiate Gothic. Blair Hall is built of white Germantown stone and is one of the largest dormitories on the campus, containing fifty-three suites. The square massive central tower is pierced by an archway which with the terraces and flight of steps forms the entrance to the campus from the southwest.

LITTLE HALLS

Adjoining the southern end of Blair Hall and following out that building's line and style on a slightly lower level of ground is Stafford Little Hall, the gift of the Hon. Henry Stafford Little, of the class of 1844. It was erected in 1899, and its thirty-two suites have the advantage of all the conveniences of a thoroughly appointed dormitory building. An extension of this building, erected in 1902, the gift of the same generous benefactor, adjoins the first, thus forming with Blair Hall at one end and the new Gymnasium at the other, a series of architecturally harmonic buildings marking the western confines of the campus.

UNIVERSITY HALL

University Hall, at the junction of Nassau street and University Place, was originally planned as a hotel, but now serves as a dormitory, its revenue going to the support of the E. M. Museum.

THE PYNE BUILDINGS

The two other dormitories on Nassau street are the Upper and Lower Pyne Buildings, the latter being on the corner of Nassau and Witherspoon streets. These buildings were erected in 1896 by M. Taylor Pyne, Esq., class of 1877, and are in the half-timbered Chester style.

CLASS OF 1879 DORMITORY

The style of architecture which has been adopted for the '79 dormitory is a development of the Tudor Gothic, so extensively used at Oxford and Cambridge and in the recent buildings at Princeton. Its site, however, on Washington Road and opposite Prospect Avenue, is so far from Blair and Little Halls and the Gymnasium, that advantage has been taken of the opportunity to change the materials and

so give it a more individual character. The walls will be of red brick, and a special study is being made of the color, size, and manner of their laying.

The building is two stories in height, with a basement in which the toilet arrangements are located. Towards the middle and directly opposite Prospect Avenue is a tower which forms the principal feature of an asymmetric composition. The accommodations of the north wing are for thirty-two men and of the south for twenty-four. There are six entries on the campus side and one opposite McCosh Walk, and the studies are generally on the Washington Road side. The suites consist of a study, two single bedrooms, separated from the study by a passage opening from the stair hall, with ample closet room. There is an open fireplace set in every study and many of the windows are bayed. In the basement of each wing are showers, water closets and laboratories, all in direct communication with the various stairways. These are all well lighted and particular attention has been paid to securing the best results possible in this part of the work. The building will be heated by steam and lighted with electricity.

UNIVERSITY LIBRARIES

ERNEST C. RICHARDSON, Ph.D., Librarian.

JUNIUS S. MORGAN, A.M., Associate Librarian.

V. LANSING COLLINS, A.M., Reference Librarian.

ENNO LITTMANN, Ph.D., Librarian Oriental Department

WILLIAM W. BISHOP, A.M., Chief of Catalogue Department.

MISS CHARLOTTE MARTINS, Chief of Purchase Department

CHARLES A. GEORGE, A.M., Superintendent of Shelves.

RALPH H. PEABODY, Assistant in charge of Circulation Department.

The Library began with the College, Governor Belcher, the patron of the College, directing his especial attention

and interest to it, and leaving to it his collection of 474 volumes. When the first catalogue was printed in 1760, the library consisted of about 1,300 volumes. It was increased largely in the sixties, but was decimated during the Revolution and in 1796 numbered only 2,300 volumes. It was partly destroyed by fire in 1802, but shortly after its size was fully restored by gifts. In 1816 it numbered 7,000 volumes, in 1839, 8,000, and in 1850 it had advanced to 9,313 volumes. In 1868 it contained but 14,000 volumes without separate building or librarian.

THE CHANCELLOR GREEN LIBRARY

In 1868 the Elizabeth Fund for the purchase of books was created by John C. Green, Esq., and soon after he erected a library building (in 1872-3) named in honor of Chancellor Green. This Chancellor Green Library building has recently been refitted throughout with the most modern system of heating, ventilation and electric light, as the working library of the University, containing the standard and latest works in all departments and especially fitted for study.

THE NEW LIBRARY BUILDING

The Chancellor Green building having for a long time been crowded beyond its calculated capacity, provision was made on occasion of the Sesquicentennial by a friend of the University for a new building with capacity of 1,200,000 volumes, besides adequate administration rooms, twenty rooms for instruction in research, and a large room for the exhibition of rare books. The new building, in the Oxford Gothic style, of Longmeadow stone, forms a hollow quadrangle of about 160 feet square, connected by a delivery room of 50 by 20 with the Chancellor Green Library. It is fitted with modern improvements in heating, ventilation, stacks, electric elevators, interior telephone, etc., and has

shelves at present sufficient for about 500,000 volumes. On the western tower gateway are statues of President Witherspoon and President McCosh, James Madison, class of 1771, fourth President of the United States, and Oliver Ellsworth, class of 1766, second Chief Justice of the United States Supreme Court.

THE CENTRAL COLLECTION

The general collection which occupies the united buildings consists of 175,000 volumes and about 47,000 unbound periodicals and pamphlets. It includes the following special collections:

The Morgan Collection of Virgils, presented by J. S. Morgan, Esq., '88; *The Pierson Civil War Collection*, presented by J. S. Pierson, Esq., '40; *The Pyne-Henry Collection* of MSS. relating to the history of the University, presented by M. Taylor Pyne, Esq., '77, and the Hon. Bayard Henry, '76; *The Princeton University Collection*, including the large collection of Princetoniana presented by Professor William Libbey, '77; *The Class of '75 Library* of English Poetry and Drama; *Class of '78 Libraries* of Chemistry and Engineering; *The Class of '82 Library* of Logic and Metaphysics; *The Class of '83 Library* of Political Science and Jurisprudence; *The Class of '88 Library* of Economics; *The Class of '89 Library* of American History; *The Class of '90 Library* of Romance Languages; *The Class of '91 Library* of Germanic Languages; and *The Historical Seminary Library*, founded by Mr. and Mrs. M. Taylor Pyne, in memory of Robert Stockton Pyne.

Special collections, other than of books or manuscripts, are: *The Garrett Collection of American Coins*, and *The Hutton Collection of Death Masks*.

SPECIAL LIBRARIES

THE GARRETT MANUSCRIPTS

The Garrett collection of Oriental manuscripts, consisting of about twelve hundred documents, chiefly in Arabic, is deposited for the present in the University Library. These include books on law, medicine, mathematics, natural sciences poetry, history, biography, geography, travels, rhetoric, grammar and lexicography, as well as works on the Mohammedan religion and the exegesis of the Koran.

Custodian: Dr. Enno Littman. Location: northwest corner, second floor, left.

CHARLES EWING GREEN ALCOVE

The alcove facing the public entrance to the Chancellor Green Library has been set aside as a memorial to the late Charles Ewing Green, LL.D., class of 1860. Mr. Green was for many years a Trustee of the University, and as the administrator of the John C. Green estate was one of Princeton's most generous and consistent benefactors.

To commemorate the active interest which he always took in the Chancellor Green Library, as well as in the general library development of the University, Mrs. Charles E. Green has erected in the alcove a brass tablet to his memory, and is filling the shelves with handsomely bound standard editions of all the Greek and Latin authors and other classical collections, making this an ideal classical reference alcove.

The smaller libraries connected directly with the University Library organization comprise four department libraries and eight seminary libraries.

DEPARTMENT LIBRARIES

These are libraries selected from the general collection and kept in proximity to the corresponding laboratories. The following are organized:

Astronomy, in Working Observatory.

Biology, supported by C. W. McAlpin, Esq., '88, in the Biological Laboratory.

Botany, in the School of Science Building.

Geology and Paleontology, in Nassau Hall.

SEMINARY LIBRARIES

Certain rooms in the new Library Building are available for the use of seminaries organized under the rules of the Faculty for "the development among our higher students of independent scholarly ability by extensive advanced study and training in the methods of original research." Several rooms have been assigned and provided with special libraries, partly by loan from the main collection, but chiefly by special endowment and purchase.

Those now organized under the rule are as follows:

Classical Philology. Location: southwest corner, second floor.

English. Founded and supported by Charles Scribner, Esq., '75. Location: northwest corner, first floor.

Mathematics. Founded by the Hon. John L. Cadwalader, '56, Professor M. Allen Starr, M.D., LL.D., '76, David B. Jones, Esq., '76, Thomas D. Jones, Esq., '76, Chandler W. Riker, Esq., '76, and the Hon. Adrian Riker, '79. Location: northwest corner, second floor.

Romance Languages. Founded by the Class of 1890. Location: southeast corner, first floor.

Philosophy. Founded by Mrs. C. B. Alexander (Ethics), and the Class of '82 (logic and metaphysics). Location: southeast corner.

Ancient History and Archaeology. Founded by various alumni and friends. Location: southeast corner, second floor.

Economics. Founded by the Class of '88. Location: northwest corner, first floor.

History. Founded by Mr. and Mrs. M. Taylor Pyne, in memory of Robert Stockton Pyne. Location: southeast corner, second floor.

Germanic. Founded by the Class of '91. Location: southeast corner, first floor.

USE OF LIBRARY

The Library is open from 8 A. M. until 10 P. M. during term time, and from 9 A. M. until 1 P. M. in vacation.

Books may be drawn by all officers and students of the University and Theological Seminary, and by any person properly introduced. The number of books which may be taken is limited to three in the case of students, with the exception of Seniors, who may take five. Officers, Fellows, and Graduate Students may take any reasonable number. Books may be kept by undergraduates for two weeks, by Fellows and Graduate students for four weeks, and by Officers for any reasonable time. All books may be renewed when due, unless wanted by some one else.

Fines are charged at the rate of two cents a day on all books kept overtime. If an overdue book is wanted at the Library for any reason, it may be sent for and a charge of ten cents for messenger made. Postal cards are sent as a reminder of books overdue only when the books are wanted by others. No books can be drawn while there are unpaid fines.

THE HALL LIBRARIES

The two literary societies—Whig and Cliosophic—have catalogued libraries of 10,000 volumes each, and the religious society, the Philadelphian, one of 1,000 volumes.

THE THEOLOGICAL SEMINARY LIBRARY

The Library of the Princeton Theological Seminary, which contains 72,000 volumes, is open to the students of the University for consultation and loan of books on Monday, Tuesday, Wednesday, Thursday, and Friday, from 10 A. M. to 1 P. M. and from 2 to 4 P. M., and on Saturday from 10 A. M. to 1 P. M.

SUMMARY OF LIBRARIES

University Library,	175,000
Hall Libraries,	21,000
Theological Seminary Library,	72,000
Total (exclusive of pamphlets and duplicates)	268,000

SOCIETIES

LITERARY SOCIETIES

The Cliosophic and American Whig Societies were founded prior to the Revolution. They are conducted by the undergraduates, but also include in their organization graduates and officers of the University. Each possesses a valuable library of over 10,000 volumes. The old halls in which they were accustomed to meet, becoming too small for their accommodation, were removed about 1890, and large and handsome buildings of white marble were erected near the old sites. Both societies pursue courses of literary exercises, award numerous prizes for orations, essays, and debates, and grant diplomas to their respective graduates.

A generous competition for University honors has always prevailed between them. On the evening before Commencement representatives of the Societies from the Senior class engage in a public debate. During Commencement week

representatives from the Junior class engage in a competition in oratory. The details respecting the Lynde debate and Junior orations will be found on later pages.

THE PHILADELPHIAN SOCIETY

The Philadelphian Society is an institution of undergraduates for the promotion of the religious interests of the University, particularly of the members of the Society. It was founded in 1825. Devotional meetings are held every Thursday evening, and under its auspices the devotional study of the Bible and foreign missions is facilitated. It has the exclusive use of two buildings. Murray Hall, erected in 1879 from a bequest left for the purpose of the Society by Hamilton Murray, of the class of 1872, contains an auditorium for public worship and a library. Dodge Hall, connected with Murray Hall by an ambulatory, is the gift of Mr. William E. Dodge and his son, Cleveland H. Dodge, of the class of 1879, in memory of the late W. Earl Dodge, of the same class. It contains four rooms for the religious meetings of the four classes, a handsomely furnished reading room containing current periodicals and recent fiction, committee rooms and the apartments of the Secretary. The privileges of this building are extended to all the students of the University irrespective of their relation to the Philadelphian Society.

THE ST. PAUL'S SOCIETY

St. Paul's Society, a religious organization composed of those of the undergraduates of the University who are members of the Protestant Episcopal Church, was founded in 1875. To its care is intrusted a number of mission chapels wherein members of the Society, licensed lay readers by the Bishop of New Jersey, conduct services every Sunday. Under its auspices a course of sermons is delivered annually

in Trinity Church. Meetings are held in an attractive room provided for the use of the Society by Trinity Parish, in the Potter Memorial House, situated on Mercer street, adjoining Trinity Church. The annual election of officers is held on the fourth Wednesday of April.

MUSEUMS

THE E. M. MUSEUM OF GEOLOGY AND ARCHÆOLOGY

This Museum, occupying the central and eastern wings of Nassau Hall, contains collections which are distributed in three general departments of geology (including mineralogy), paleontology, and archæology. Their arrangement is especially adapted to the purposes of comparative study.

In the GEOLOGICAL DEPARTMENT a special room contains a unique collection of over 5,000 specimens of erratic boulders and drift materials from Switzerland. There is also a special room devoted to the typical rocks and fossils of the State of New Jersey. A collection of the typical rocks of the State of New York represents the series as described in the Geological Survey of that State.

There is in this department a large collection of minerals, chiefly crystals, containing about 2,600 specimens, bequeathed to the University by the late Archibald MacMartin of New York. The perfection of the specimens, and the number of localities represented in each family, make this collection one of special value.

PALEONTOLOGICAL DEPARTMENT.—The upper or eastern hall contains the main collection; on the platform are the skeletons of a Mastodon, an Irish Deer, a Cave Bear, and some of the extinct birds of New Zealand; also the skulls of *Uintatherium* and a remarkably complete skeleton of *Cervalces*. There are mounted casts of the gigantic reptiles and

mammals of the secondary, tertiary, and quaternary ages. Surrounding the room is a very perfect collection of vertebrate and invertebrate fossils from Europe and America, illustrating the principal organic forms of all the geological epochs. The typical fossils selected agree, as far as possible, with those mentioned in Dana's *Geology*, as characteristic of different geological periods. Included in this series are the fine eocene and miocene fossils, many of which are type specimens, procured in the west by the various Princeton collecting parties. There is also a series of fossil insects and plants from Colorado, most of which are also types. Altogether the number of fossils, not counting duplicates, is 15,000.

ARCHÆOLOGICAL DEPARTMENT.—Here are relics of the Swiss lake dwellings, and numerous implements of stone and bronze from Denmark; also several hundred flint instruments from most of the classical localities of the palæolithic and neolithic ages of France.

America is represented by the pottery and human remains of the mound builders, by several hundred specimens of Mexican and Peruvian pottery, and by a number of recent Indian relics. The interesting ethnological collection of objects, chiefly from Alaska and New Mexico, which Dr. Sheldon Jackson presented to the Theological Seminary of Princeton, has been transferred to this Museum by the Trustees of that institution, with the consent of the donor. There is also a series of models of the cliff-dwellings and Pueblos of the Southwest, executed under the direction of Dr. Hayden.

Below the eastern hall are the lecture and working rooms.

MUSEUM OF BIOLOGY

The biological collections have been chiefly made from the endowment fund of the John C. Green School of Science. There have also been many smaller donations to the Museum

from time to time. The collections are placed in the large upper hall of the School of Science building, and are at present especially rich in osteological specimens. On the same floor are the laboratory and working rooms of the Curator of the Museum. The collection of vertebrates includes a large number of mounted and disarticulated skeletons of mammals, reptiles, birds, and fishes. Among the invertebrates are a series of ascidians, echinoderms, molluscs, crustaceans, insects, worms, corals, sponges, and microscopic preparations of small forms. Students may apply to the Curator for access to the catalogue and cases containing the skeletons.

The Herbarium is on the second floor of the School of Science building, and is arranged as a museum of the botanical collections, also as a working laboratory for students. The plants are classified according to the *Pflanzen-familien* of Engler and Prantl, and include specimens from the different sections of the United States, and from South America, Europe, and Australia. There are extra specimens for laboratory use and dissecting, together with compound microscopes, reagents, anatomical instruments, section cutters, models, diagrams, and books of reference; and the reference library of the late Professor Leo Lesquereux, presented to the University by Mr. P. W. Huntington of Columbus, Ohio.

Recent accessions to the Museum include skeletons of *Chlamydophorus truncatus*, presented by the La Plata Museum through Professor W. B. Scott; and of the Aard Vark (*Orycteropus capensis*) from South Africa. Also donations by the Rev. Dr. Nassau, '54, of reptiles and various invertebrates from Batangas, West Africa, and by the Rev. William Harris, '92, of a collection of beetles from Laos, Siam.

DEPARTMENT OF ORNITHOLOGY. — The ornithological collections of the University form a department of the Museum of Biology. Starting with a representative local

collection of the birds of New Jersey, which are mounted and on exhibition in the halls of the museum, these are supplemented in the laboratories by the following groups of unmounted birds, which show the relations of the local collection to the avifauna of the world at large. A North American collection, a European collection, an Australian collection, an Indo-Asian collection, a South American collection. There are in all some sixteen thousand individuals.

The South American Collection, for which the Hatcher Expeditions to Patagonia are largely responsible, owing to the interest of Mr. John W. Garrett, '95, of Baltimore, was materially augmented by Professor William B. Scott, during his stay in Argentina. Very advantageous exchanges with the Museo La Plata were made. Through the liberality of friends of the University, valuable ornithological material was purchased from S. Pozzi, Esq., of La Plata. These collections are especially valuable in view of the extensive work assumed by the University on the fauna of Patagonia. The additions to the Department of Ornithology from this source alone aggregate some eight hundred bird skins.

The collections are further supplemented by some four thousand sets of eggs, most of them in nests, as well as much alcoholic material and many skeletons.

The department received in exchange during the year 1900 from the British Museum of Natural History some two thousand birds. These represent parts of the avifauna of Europe, India, and Asia, and which aid materially in rounding out the existing collections. Many minor gifts have been received from alumni, particularly representatives of game birds from many localities in North America.

All this material affords facilities for special study in factors and problems, such as individual variation, geographical distribution and variation problems, migration and the like. Graduate students will find special facilities for work in the laboratories connected with this department.

MUSEUM OF HISTORIC ART

The upper story of the museum contains a library for classical and Mediæval archæology, collections to illustrate the history and processes of the graphic arts, reproductions of Greek and Roman coins and gems, specimens of Greek and Roman marble, a collection of bronze medals and casts of ivories from the Roman to the Gothic period, and a series of casts from the Arch of Trajan at Beneventum. The architectural library of the late Frederick Barnard White has recently been added.

In the central story the Trumbull-Prime collection has been rearranged and new cases have been added. The purpose of this collection is to illustrate the history of pottery and porcelain. Egypt is represented by sepulchral figurines, beads and amulets; Phœnicia by numerous Cypriote vases; Greece, Etruria, and Southern Italy by Corinthian aryballoi and fine examples of larger vases of black-figured and red-figured types. The Orient is further illustrated by specimens from Persia, China and Japan; South America by Peruvian pottery. The collection is richer in examples of European wares, to which England, France, Germany, and Holland are the chief contributors, but Italy, Russia, Sweden, and Switzerland are also represented. The small room on this story contains the Livingston loan collection of pottery. This collection is noteworthy for the illustrative material it furnishes for the early history of our country.

The staircase and basement are occupied by a carefully selected collection of casts of ancient and mediæval sculpture presented by the Class of 1881 at its decennial. This collection was formed to illustrate the history of ancient sculpture in Egypt, Babylon and Assyria, Persia, Greece and Rome, and of mediæval sculpture in Italy, France and Germany. There has been recently added from the same fund a collection of casts of renaissance sculpture.

The museum is open to visitors from 8 A. M. to 6 P. M.

MATHEMATICAL MODELS

In the Graphics room of the School of Science may be found a set of duplicates of the more important Olivier models of ruled surfaces; the Björling developable surface models, a number of the Muret set and the Schröder mathematical models. The Brill plaster models of higher algebraic surfaces are in the Mathematical Seminary room in the Library.

LABORATORIES AND APPARATUS

PSYCHOLOGICAL LABORATORY

The laboratory for experimental psychology was founded and equipped for work at the beginning of the academic year 1893-94. It occupies a suite of rooms on the third floor of the west wing of Nassau Hall, on the south side, opposite the histological laboratory. It comprises five rooms, *i. e.*, a dark-room, an optical room, an acoustic room, a reaction and muscle-sense room, and a room fitted up for demonstrations and practical work. The equipment consists primarily of the standard pieces of apparatus for demonstration and research, together with illustrative models and charts; and is added to as the development of the department in special directions makes it necessary. Professor Allan Marquand has presented to the laboratory both models of his well-known "logical machine," and also a number of volumes. A library of reference books is connected with the laboratory, the most important recent additions to which are a complete set of the neurological journal *Brain* (16 vols., presented by Messrs. Macmillan & Co.) and the *Index Catalogue*, both series, of the United States Surgeon General's Library (presented by the former Surgeon General, Dr. Billings). Attention may be called to the very

complete list of journals in psychology, philosophy, and neurology (56 titles), which are on file in this library. Researches from the laboratory are published in the *Princeton Contributions to Psychology*, now in the fourth volume.

PHYSICAL LABORATORY AND APPARATUS

The physical laboratory is fitted up with tables and other arrangements to accommodate about forty students at once, though the classes usually work in small divisions, to facilitate the arrangement of the course in logical order and to avoid interference with the hours allotted to other courses.

The collection of apparatus for lecture demonstrations is a very good one, but as far as practicable the equipment consists of instruments which are serviceable not only in the lecture courses, but in the practical laboratory work. The collection contains most of the standards and instruments of precision that are needed by the advanced student or investigator. The shop connected with the School of Science is at the service of the department of physics, and apparatus needed for special researches may be constructed there.

BUILDINGS AND APPARATUS OF THE SCHOOL OF ELECTRICAL ENGINEERING

The magnetic observatory is a brick building without iron in its construction, situated on McCosh Walk, in a position in which it is, as far as possible, free from the disturbing influences of large masses of iron.

The laboratory is in the basement, where permanent piers, for the installation of instruments, are provided.

Among the instruments in the laboratory which deserve mention are a large physical balance, Thomson's quadrant and other forms of electrometers, specially constructed galvanometers by Edelmann, Hartmann, Nalder Brothers and Elliott, Thomson's current balances, two large resistance

boxes adjusted by Anthony, Post-office boxes, megohm box standard condenser, standards of induction and of resistance. Besides these there is a full outfit of galvanometers, voltmeters, ammeters, and all other instruments needed in technical work or in exact investigation.

The dynamo building is connected with the School of Science building. The motive power for the machinery is furnished by a sixty horse-power boiler and a Ball engine. The dynamo plant consists of a Westinghouse alternate generator with a full set of transformers, a Westinghouse poly-phase generator, a Westinghouse rotary converter, Mather, Edison, Brush arc, Eickemeyer and Gramme generators, a machine constructed in the shop of the School of Science, Brush, Eickemeyer and other motors. With these machines is a complete outfit of accessories, and a large rheostat of German silver used in testing. Arc and incandescent lamps are so arranged that the various systems of distribution may be studied.

The dynamo building is connected with the magnetic observatory by heavy copper wires, and by underground cables, so that the instruments of the magnetic observatory are available for experimental work with the dynamos. Four sets of storage batteries are also connected with the plant.

In addition to the above described equipment, the plant of the University Power Company for heating and lighting the University buildings, is available for purposes of experimental study in which the quantities to be measured are of the order of those met with in commercial applications. Their plant contains four 250 horse-power boilers, for power and steam heating; two 200 K. W. and one 100 K. W. direct connected alternate current generators; one motor-driven exciter and steam turbine-driven exciter; the station switch-board and a special experimental switch-board. This last is entirely under the control of the Department of Electrical Engineering. The entire equipment of generators,

transformers, motors, etc., is available for the use of the Department.

CHEMICAL LABORATORIES

The various departments of chemistry, general, applied, and organic, as well as mineralogy, occupy the chemical building, which is of fireproof construction, well lighted and ventilated. The Department of General Chemistry is fully equipped for its work.

The top floor of the building is entirely devoted to laboratories for students in the various courses of applied and organic chemistry, with private rooms for the professor and assistants, weighing room, and sulphuretted hydrogen room. Each student has a separate desk, provided with water, gas, suction for filter-pump, and sink.

On the second floor are two large lecture rooms, a room for experiments in chemical physics, two cabinets for specimens and lecture apparatus and professors' private laboratories.

In the basement are various rooms for gasometric work, and for experiments in technical and organic chemistry, which cannot conveniently be undertaken in the laboratories for general students, blowpipe and assay laboratories, a mineral cabinet, janitor's room, storerooms, and battery.

MINERALOGICAL COLLECTIONS OF THE SCHOOL OF SCIENCE

There are two cabinets of minerals. The principal one contains over five thousand specimens, embracing nearly every mineral species. Smaller cabinets, with labeled and unlabeled minerals, are provided for practice with the classes.

There is also a collection of specimens of typical rocks, together with a large number of Fuess's rock sections, as well as sections from other sources, for the study of lithology.

The department is provided also with section cutters, grinding lathes, and other appliances for the special study

of minerals and rocks; including a complete Groth's polarizing apparatus with goniometer, a large Babinet goniometer, Norremberg's polarizing apparatus, Rosenbusch's microscope, and minor apparatus.

HISTOLOGICAL LABORATORY

This laboratory is situated on the upper floor of the west wing of Nassau Hall. The western room serves as a lecture hall. On the north side of this room there are fourteen tables. There are lockers for forty-two students.

Materials for class work and specimens are prepared in the assistant's room. Here, also, is kept a complete supply of chemicals, stains, and mixed reagents. The laboratory is supplied with the following apparatus: three paraffin baths, three microtomes, a centrifuge, an air pump, aquaria and cages for keeping living material, and a full assortment of glassware.

East of the assistant's room is the instructor's room, where the collections are kept. These consist of a large general collection of slides, the three class collections from which the specimens for each exercise are drawn, and the collection of recent material from the main groups of the animal and vegetable kingdoms.

East of this room are two rooms for advanced students and fellows engaged in research work.

The laboratory is provided with Zeiss, Lertz, and Reich-art microscopes, and a Zeiss projective apparatus.

CLASS OF 1877 BIOLOGICAL LABORATORY

This building is situated at the east end of Dickinson Hall. It was presented to the University by the alumni of the class of 1877 at their decennial reunion. It is designed for the advanced practical and experimental courses in comparative anatomy and embryology. The main morpho-

logical laboratory, upon the second floor, is equipped for the instruction of undergraduates. This room has recently been fitted up with exhibition cases which, at present, contain about five hundred mounted preparations illustrating the comparative anatomy of vertebrates. New preparations are constantly being added to the collection through the efforts of a skillful preparator.

The first floor comprises the embryological laboratory, intended for the use of University students engaged in research. The basement is designed for aquaria. The laboratory is open to students during the day from 8 A. M. to 5 P. M.

PALEONTOLOGICAL LABORATORY

This laboratory has been fitted up in Nassau Hall to provide for practical instruction in the courses in paleontology. Each student has a table with drawers, etc., for his own use, where the study of fossil forms can be conveniently carried on. The very extensive collections of the geological museum furnish ample material for the general course in paleontology, stratigraphy, as well as for the purposes of research. A series of diagrams, maps, and models is provided, as are also microscopes and prepared slides for the examination of the minute structure of various extinct forms, both animal and vegetable.

For advanced students engaged in original investigations, there are private rooms available.

CIVIL ENGINEERING LABORATORY AND APPARATUS

The laboratory is used in connection with the instruction in experimental mechanics and the planning and construction of engineering works, and contains a torsional testing machine; a wire and cement tester; various kinds of current meters and water gauges; a Worthington water meter; a con-

trivance for determining the hydraulic slopes within earthen retaining banks; a flushing tank; a reaction wheel and other minor pieces of hydraulic apparatus; a double-acting steam pump; a locomotive link and valve motion; a ten horsepower compound engine with condenser, indicators, gauges, and a Prony brake; and a 25-foot iron working model of a single track railroad bridge, with a complete outfit of false-works and other appliances for its erection, designed especially for this institution.

The illustrative apparatus of the laboratory comprises rail sections and joints; specimens of the products of iron and steel mills and other building materials; a Sturtevant blower; models of water wheels, of trestles, of the details of iron bridge and roof joints, and of vaults and arches. A collection of lantern slides, especially selected for use in the class-room, has been provided, and includes a large number of views, in detail, of the East River suspension bridge at different stages of its progress, and of other structures.

The instruments provided for the course in geodesy represent the work of twelve different firms of high repute, care being taken to avoid the duplication of instruments by the same maker, and include a 12-inch geodetic transit, a large plane-table with telescopic alidade and a telemeter; engineer's, mining, and solar transits; wye and dumpy levels; surveyor's compasses; mercurial and aneroid barometers; sextants; heliotropes; various forms of linear measures; and a large assortment of reconnoitring instruments.

OTHER BUILDINGS AND ATHLETIC GROUNDS

HALSTED OBSERVATORY

This is appropriated to scientific work, chiefly in the department of astronomical physics. The building, the gift of the late General N. Norris Halsted, is of stone, with a dome thirty-nine feet in diameter, the power for moving it and its sliding shutter being furnished by an electric motor and storage battery. In it is mounted the great equatorial, of twenty-three inches aperture and thirty feet focal length, made by the Clarks, and provided with all the usual accessories, micrometric, spectroscopic, and photometric. The building also contains a clock and a chronograph, and is in electric connection with the Observatory of Instruction. At present the principal work is the photometric observation of variable stars under a grant from the Carnegie Institution.

OBSERVATORY OF INSTRUCTION

This establishment is devoted entirely to the use of students, and is fully equipped for its purpose. It possesses an equatorial (by Clark) of $9\frac{1}{2}$ inches aperture, with a full complement of spectroscopic and other accessories. It has also a 9-inch reflector; a meridian circle with circles 2 feet in diameter, and a 4-inch telescope; two transit instruments with 3-inch telescopes, both of them arranged for use as zenith telescopes; a 3-inch prime-vertical instrument; a chronograph; two standard clocks, and two chronometers. There are also a number of sextants, and all the other subsidiary apparatus required for carrying out the work involved in the courses on practical astronomy. See Astronomy, 5, 6.

ISABELLA McCOSH INFIRMARY

The Infirmary, built by the alumni and friends of the University, contains all the modern arrangements of the best hospital construction. The buildings are pleasantly located on the hillside below Prospect, commanding every advantage of position as to air, outlook, and sewerage. The two buildings are isolated from one another and are connected only by a long corridor. One of these buildings is devoted to the treatment of all ailments not requiring special isolation. The other provides for the reception of those cases in which isolation is desirable. While the health of Princeton is exceptionally good, the occasional illness incident to so large a body of students demanded accommodation suitable for its care. This has been secured in the Infirmary by the liberality of friends of the University.

The Sanitary Committee of the University has the institution under its care. It is thus brought under constant and careful supervision. It is open to the reception of students on the certificate of attending physician. As the Infirmary is without endowment, each student by the payment of a small fee secures for himself, in all cases of ordinary illness, needed care, including board, nursing and laundry, everything but physician's fees and medicines, without charge. Where special nursing is required, an additional charge covering actual expenses will be made.

DICKINSON HALL

This building, the gift of John C. Green, Esq., is used for the class-room work of the Academic Department.

The building, erected in 1870, was built of local stone, trimmed with Connecticut limestone. It was named by Mr. Green as a memorial of Jonathan Dickinson, first President of the College, and was designed by George B. Post, architect, of New York.

In 1876 extensive alterations were made in the building, and the exterior has been very much changed, being now Gothic in its general appearance.

The first and second floors contain lecture rooms sixteen feet high and admirably lighted; over these, on the third floor, is the Examination Hall, eighteen feet high, containing a stage for public speaking, and accommodating about six hundred persons.

MARQUAND CHAPEL

The chapel was the gift of the late Henry G. Marquand, Esq., of New York. The cornerstone was laid in June, 1881. The building is constructed of brownstone, and is in the shape of a Greek cross. The apse contains the organ and choir stalls. A gallery over the main entrance is for visitors. The faculty stalls are along the sides of the building. The mural and window decorations are noteworthy. The St. Gauden's heroic bronze high relief of the late President McCosh, erected by the Class of 1879, faces the visitor on entering; by its side are the low relief memorial tablet to Professor Joseph Henry and the bronze tablet to Professor Arnold Guyot, set in a fragment of a Swiss glacial boulder presented by the authorities of his native city, Neuchatel. On the east wall of the southeast corner of the chapel is the memorial tablet to the Rev. James Ormsbee Murray, first Dean of Princeton University, presented to the University in November, 1901. This tablet consists of rose-colored Numidian marble, upon which is a medallion-portrait in bas-relief of white marble, surrounded by an embossed wreath.

The north and south windows are in memory of Frederick Marquand, of the class of 1876, and William Earl Dodge of the class of 1879. The west window is the gift of Mrs. T. Harrison Garrett of Baltimore, in memory of

her son, Horatio W. Garrett, of the class of 1895. The daily morning services are held in the chapel.

ALEXANDER HALL

This handsome building is the gift of Mrs. Charles B. Alexander. It is used for Commencement and Class Day exercises, public lectures, and other University gatherings of a general character. The auditorium is arranged with sloping floor and high gallery, so that an audience of fifteen hundred may be comparatively near the speaker. The rostrum and President's chair are finished in colored marbles and polychromatic mosaic. Behind the rostrum is a row of mosaic wall pictures designed by J. A. Holzer, illustrative of the Homeric story. A large organ built by George Jardine and Son, and embodying the most recent features of organ construction, stands in one of the small galleries near the rostrum.

The building is constructed of granite and brownstone in the Romanesque style of western France. The front toward the south exhibits a large rose window beneath a gable roof, and between the central structure and two side towers are two fine round-arched openings which lead into a wide ambulatory encircling the building. From this ambulatory the rostrum and auditorium are reached. The two side towers and two smaller ones at the rear enclose staircases, which lead to the auditorium gallery. The building, which was designed by William A. Potter, has been decorated with sculpture under the direction of the architect, by J. Massey Rhind. Beneath the rose window is a seated figure of Learning, on one side of which are allegorical figures of Architecture, Sculpture, Painting, Poetry, Music, and Belles Lettres, on the other are Oratory, Theology, Law, History, Philosophy, and Ethics. There are other sculptures about the rose window and in the niches around the ambulatory.

GYMNASIUM

The gymnasium was built in 1869 by Mr. Robert Bonner and Mr. Henry G. Marquand. It contains, besides the main hall with the apparatus for physical training, hot and cold shower and plunge baths, dressing rooms, bowling alleys, and a gallery for visitors. The gymnasium is open daily from 10 A. M. to 7 P. M. throughout the year. The director is in attendance during these hours to examine, advise, and instruct all who may desire his services.

THE NEW GYMNASIUM

The new Gymnasium, erected by the alumni at a cost exceeding \$280,000, is now completed. It is situated toward the southwest end of the campus, in close proximity to the Brokaw swimming-pool, which has been architecturally combined with it. In style of architecture this building conforms to the Academic Gothic of Blair and Little Halls, and the material used in its construction is the same Germantown stone. These three buildings, harmonizing in style and general effect, form an almost unbroken western boundary to the campus.

The façade of the Gymnasium comprises two full stories and a tower. The lower story contains a trophy hall, finished in English oak, and the upper floor is devoted to committee rooms, superintendent's quarters and other necessary apartments.

The Gymnasium proper is entered through the trophy hall. It is 166 feet long and 101 feet wide, and is almost as high as the two-story portion of the building. Its roof is supported only by the side walls, so that the interior is unobstructed. About its walls is an elevated running-track over 150 yards around, and in the basement are locker rooms, bowling-alleys, and places for various forms of indoor exercise.

THE UNIVERSITY FIELD

This field, which is large enough for three football games to be played simultaneously, is the scene of all University athletic contests and games held in Princeton. The entrance gateway is the gift of Mr. Ferris S. Thompson of the class of '88. Besides the baseball ground and football field, there are a 220-yard straightaway and a quarter-mile cinder track and the following buildings: (1) The University Athletic Clubhouse, the gift of Henry F. Osborn, class of 1877, containing training quarters, dining-room, parlor, bedrooms, baths, etc., and the trophy room, which is open to visitors. (2) The Cage for indoor winter practice, a well-lighted brick structure with a clear floor space of 60 x 140 feet. (3) The Field House, containing dressing-rooms, lockers, and baths for the University and visiting teams. (4) The Grand Stand, the gift of Mrs. John J. McCook of New York. The clock in the peak of the roof is the gift of the Glee Club of 1890. (5) The Open Stand, the result of alumni subscriptions.

THE BROKAW FIELD

This field was provided by the alumni for the benefit of undergraduates who are not members of the University teams. On a terrace are the University Tennis Courts, and above them is the Brokaw Memorial Gateway and Building, erected in 1892 by Mr. I. V. Brokaw of New York, in memory of his son, Frederick Brokaw, of the class of 1892, who lost his life at Elberon, N. J., in 1891 while attempting to rescue a drowning girl. The building contains dressing-rooms, shower-baths, and lockers for several hundred men. A wing contains a porcelain swimming pool 100 feet long by 25 feet wide.

Students of the University are eligible to membership in THE PRINCETON GOLF CLUB, whose new eighteen hole golf links cover 240 acres, and adjoin the campus.

CLASS OF 1886 MEMORIAL BUILDING

This building, erected by the Class of 1886, upon an elevation overlooking the Princeton golf course, commands an extensive view of the adjacent country and in design is admirably in keeping with the surroundings.

The building contains ample provision in the way of bath and locker rooms, reception rooms, etc., designed for the use of members of the Princeton Golf Club, with dormitory and kitchen facilities, to be devoted to the use of the members of the Class of 1886. The building will be conveniently furnished and supplied with the most modern system of heating and electric lighting.

PART V

**GENERAL ORDERS, PRIZES, SCHOLAR-
SHIPS, CHARITABLE FUNDS, PECU-
NIARY AID, EXPENSES, AND
UNIVERSITY BILLS**

GENERAL ORDERS

TERMS AND VACATIONS

The year is divided into two terms of eighteen weeks each.

The first term of the present academic year (1903-1904) began on Wednesday the 23d of September, 1903, and ends on Wednesday the 10th of February, 1904. The second term begins on Thursday the 11th of February, 1904, and ends on Wednesday the 15th of June, 1904, the day of the annual Commencement.

REGULATIONS CONCERNING REGISTRATION

At the beginning of the academic year each undergraduate student shall report in person at the Registrar's Office, before 1 P. M. on the first Thursday of the term, and register:

- a. His full name, home address, and Princeton address.
- b. His choice of electives for the term.

After the Thanksgiving recess, the Christmas vacation, and the Spring recess, the student shall report in person at the Registrar's Office, before 5 P. M. of the day on which exercises are resumed, and register his name.

The choice of electives for the second term must be reported in writing to the Registrar, on or before the third Monday in January.

In every case of delay in registration *three* absences will be recorded against the student for each day that the registration is delayed. Serious cases shall be punished by postponement of the registration with corresponding increase

in the absences recorded, by putting the student on probation, by suspension, or otherwise, as the Faculty may determine. The penalty for delay in reporting the full list of electives for the term shall be the record of one absence each day for each elective not reported, until the list is complete; this delay to be reckoned from the registration at the beginning of the academic year or from the third Monday in January. Serious cases shall be punished more severely as the Faculty may determine. If the student enter any elective class after exercises with that class have been held, he shall be reported by the instructor as absent from those exercises.

REGULATION OF ATTENDANCE

ABSENCE FROM PRINCETON

1. Students are not allowed to leave or be absent from the University during term time, except as provided in section 5 below, without permission of the Faculty. Requests should ordinarily be presented to the Committee on Attendance, or in special cases, to the class officer or the Dean of the Faculty. Unauthorized absence subjects a student to the penalty provided in the rules, and makes him liable to such further penalty as the Faculty may deem necessary.

COMMITTEE ON ATTENDANCE

2. The Committee on Attendance has charge of all matters pertaining to attendance on chapel and class exercises. It meets every Wednesday noon in the Faculty room, University Offices.

DIVISIONS OF THE YEAR

3. In the regulation of attendance, the academic year shall be divided into four quarters.

EXCUSES

4. No excuse for absence will be received except in extraordinary cases. Excuses for such cases must always be offered in person to the Committee on Attendance, not later than the second meeting of the committee after the return of the student to his academic exercises.

5. Students who absent themselves from town over Sunday and who desire that the absence from chapel thus incurred shall be excused must file a statement in the Registrar's office on a form provided by the office, in the week immediately preceding or following the absence. Such excuses shall not be granted more than *twice* in any one quarter, and further absences thus incurred will be counted on the gratuity. No excuse will be granted unless application is made within a week of the absence. Students may however go *home* over Sunday, and absences so incurred will be excused on filing at the Registrar's office, on a special form provided by the office, a request by parent or guardian that such absence be excused. Such excuses to be valid must be presented in the week preceding or following the absence.

6. Absences necessarily incurred by the University Musical Clubs in connection with a tour taken in vacation by permission of the Faculty, will be excused on recommendation of the Music Committee.

7. Absences necessarily incurred by the University athletic teams in connection with intercollegiate games will be excused on recommendation of the Committee on Outdoor Sports.

ATTENDANCE ON CHAPEL EXERCISES

8. Every undergraduate student is required to attend morning prayers in the chapel and the stated services on Sunday unless excused by the President or Faculty. If the

student is irregular in his attendance notice will be sent to his parent or guardian. When his absences in any quarter exceed a certain number (18 for Seniors and Juniors, 14 for Sophomores, Freshmen, and Specials) he becomes liable to discipline, which in ordinary cases shall be suspension, though other penalties may be imposed at the discretion of the committee.

9. If, at the end of the first quarter in each term, the student's absences from the chapel are less than the limit above fixed, the difference, or 6, if the difference be greater than 6, will be added to the limit fixed for the second quarter in that term to determine the number which renders the student liable to discipline.

10. If the student's absences in any quarter exceed the limit and discipline is inflicted, any further irregularity in attendance renders him liable to further discipline at the discretion of the committee; and a number of absences, not exceeding the number incurred in excess of the limit, may be charged against him at the beginning of the next quarter.

ATTENDANCE ON CLASS EXERCISES

11. Every undergraduate student is required to attend the scheduled exercises of his class. When his absences in any quarter exceed a certain number (10 for Seniors and Juniors, 8 for Sophomores, Freshmen, and Specials) he becomes liable to discipline, which in ordinary cases shall be the imposition of extra work, though other penalties may be imposed at the discretion of the committee. After the first penalty has been imposed, any further irregularity in attendance in that quarter renders the student liable to further discipline at the discretion of the committee.

12. If a student is irregular in his attendance on the exercises of any instructor, the instructor may impose extra work; and, in case the absences exceed one-sixth of the

exercises with that instructor, he may debar the student from the regular examination. A student thus debarred from examination shall be dealt with according to the regulations for conditioned students.

COMMENCEMENT EXERCISES

The Annual Commencement takes place on the Wednesday preceding the last Wednesday but one in June.

The Baccalaureate Sermon of the President to the graduating class is delivered on Sunday of Commencement week.

The Class Day exercises of the graduating class are held on Monday of Commencement week. The reading of theses by the graduating class of the School of Science, the annual meetings of the Literary Societies, the annual meeting of the Alumni Association of Nassau Hall and the Lynde Prize Debate are held on Tuesday.

PUBLIC WORSHIP

Prayers are offered in Marquand chapel every week-day morning.

Divine service, under the superintendence of the President, is held in Marquand chapel, on Sunday, at 11 o'clock A. M.

Permission to attend divine service elsewhere than in the chapel, on special occasions, is granted on application to the President. For permission to attend regularly one of the churches of the town on Sunday morning, a written request from the parent or guardian of the applicant must be presented to the President.

PUBLIC LECTURES

The interest of \$10,000, presented by Mr. Spencer Trask of New York City, is available to secure the services of eminent lecturers to deliver public lectures before the University on subjects of special interest.

PRIZES

ALEXANDER GUTHRIE McCOSH PRIZE

The interest of \$1,500 will be given annually to that member of the Senior class who shall write the best essay in philosophy, including psychology, logic, metaphysics, and the history of philosophy. The subject of the essay for the present year will be, Agnosticism. It must be handed in on or before June 1.

THE LYNDE DEBATE PRIZES

Three prizes—the income of \$5,000, contributed by Charles R. Lynde, Esq.,—will be awarded by a committee appointed by the Faculty, to the three successful competitors in a debate on the Tuesday evening preceding Commencement. The competitors are six members of the Senior class—representatives of the Literary Societies—selected by committees appointed by the Societies respectively, from their own members in the Faculty.

BAIRD PRIZES

Through the liberality of Charles O. Baird, Esq., the following prizes, representing the income of \$6,000, will be given to those who excel in the oratorical exercises of the Senior class, viz: The Baird prize of \$100, to the best speaker of those who have ranked among the first six writers in any two of the three departments of English literature, rhetoric, and oratory; a prize for oratory, of \$50, to the best speaker, exclusive of the Baird Prizeman, of

- those who, in the same departments, have ranked among the first twelve writers; a prize for delivery, of \$30, to the best speaker exclusive of the two just mentioned; also, a prize for poetry of \$50; and two prizes of \$40 and \$30, respectively, for the best and second best written disputations.

CLASS OF 1859 PRIZE

The interest of \$2,000, given by the Class of 1859, will be awarded to that member of the Senior class who shall write the best essay on William Makepeace Thackeray and pass the best examination on "King Lear." The essay must be handed in on or before June 1st, and the examination will be held in June. The subject of the essay for the class of 1905 will be Robert Louis Stevenson.

GEORGE POTTS BIBLE PRIZES

The yearly interest of \$1,000, given in 1867 by Mrs. Sarah A. Brown, expended in the purchase of two copies of Matthew Henry's Commentary on the Bible, will be presented to the best two Biblical scholars of the Senior class at the end of their course.

LYMAN H. ATWATER PRIZE IN POLITICAL SCIENCE

This prize, being the annual interest on the sum of \$1,000, contributed by the Class of 1883, was instituted as a memorial of the Rev. Lyman H. Atwater, D.D., LL.D., Professor of Political Science. It will be given to that member of the Senior class who shall have passed the best examination and written the best thesis on some subject in political science, to be assigned by the professors in charge of the department of jurisprudence and politics. The subject for the 1904 examination and thesis will be: The System of Proportional Representation.

The thesis must be ready June 1; the examination will be held on that day.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE

Mrs. Norman White has established in memory of her son, Frederick Barnard White, of the class of 1883, a prize in architecture, yielding \$50 each year. It is open to the entire Junior and Senior classes and to special students who take a full schedule of studies. It will be given for the best essay and examination. The subject of the essay for this year is: The Development of Byzantine Church Architecture. The subject of the examination will be Byzantine Architecture. The essay should be presented before June 1.

THEODORE CUYLER PRIZE IN ECONOMICS

The interest of \$5,000, presented by Mr. C. C. Cuyler, of the class of 1879, will be given to that member of the Senior class who shall present the best thesis and pass the best examination in June on some subject in political economy, to be assigned by the professors in charge of that department. The subject for the thesis of 1904 will be: Taxation in the English Colonies in America prior to 1776, and the examination will cover The Theory of Public Finance.

CLASS OF 1869 PRIZE IN ETHICS

The annual interest of \$3,000, given by the Class of 1869, will be awarded to that member of the Senior class who shall pass the best examination in ethics and write the best essay. The essay to be presented on or before June 1. The subject of the essay for the Class of 1904 will be: A critical examination of *Taylor's* Problem of Conduct.

C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY

The sum of \$50 will be awarded annually at Commencement to that member of the graduating class who shall have maintained a creditable standing in the subject of American history, and who shall have submitted the best written dissertation upon some subject of American history assigned by the professor in charge of that department, and based, in part at least, upon original investigation.

The dissertation must be at least 5,000 words in length, and must be accompanied by a bibliography of the subject. Specific references to the sources used must be given throughout.

The prize shall be awarded by the professor or professors in charge of the department of American history.

NEW YORK HERALD PRIZE

The yearly interest of \$1,000, presented by Mr. James Gordon Bennett, will be given to that member of the Senior class or to the special student of satisfactory standing, who shall have taken for both terms of Senior year at least two of the courses given by the departments of jurisprudence and politics and political economy and sociology, and at least one course in English literature for both terms, and who shall have presented the best thesis in English prose upon some subject of contemporaneous interest in the domestic and foreign policy of the United States government.

The subject for 1904 will be: The Status of Porto Rico and the Philippines under American Law.

The thesis must be ready by June 1.

WOOD LEGACY

The sum of \$150, the income of a legacy of Dr. George B. Wood, will be awarded to that member of the Junior class who shall stand highest for the Junior year.

JUNIOR ORATOR MEDALS AND MACLEAN PRIZE

Four gold medals, or books of equal value, will be awarded by a committee appointed by the Board of Trustees, to the four successful competitors in an oratorical contest during Commencement week. The competitors are eight members of the Junior class—four from the Cliosophic and four from the American Whig Societies—selected by committees appointed by the Societies respectively, from their own members in the Faculty.

The Maclean Prize, founded by the will of the late Henry A. Stinnecke, consisting of the sum of \$100, will be given to that one of the orators chosen by the Literary Societies from the Junior class, who shall during Commencement week pronounce the best English oration.

The committee of judges will be composed of a professor of English and two graduates of the University not members of the Faculty.

DICKINSON PRIZE

The Dickinson prize, founded in 1782 by the Hon. John Dickinson of New Jersey, Governor of Pennsylvania and Delaware, consisting of a medal of the value of \$60 (or its equivalent in money), will be awarded to that member of the Junior class who shall write the best dissertation upon a theme in logic; the dissertation to be presented on or before June 1. The subject of the dissertation: The Theory of Inference.

CLASS OF 1876 MEMORIAL PRIZE FOR DEBATE IN POLITICAL SCIENCE

This prize is to be given annually by the Class of 1876 to the successful contestant in a debate on a subject of current interest in American politics, to be held on Washington's

Birthday, said prize to be the interest of \$2,000. The competitors, four in number, one from each class, are to be chosen by a vote of their respective classes.

CLASS OF 1870 JUNIOR ENGLISH PRIZE

Of the yearly interest of \$1,500, one-half will be given to the best Old English scholar, and one-half to the best English literature scholar of the Junior Academic class.

THOMAS B. WANAMAKER ENGLISH LANGUAGE PRIZE

This prize, the yearly interest of \$1,000, will be given to that member of the Junior Academic class who shall pass the best examination in English philology, and write the best thesis on some assigned topic therein.

MARY CUNNINGHAM HUMPHREYS JUNIOR GERMAN PRIZES

Two prizes of \$25 and \$15, respectively, established by the late Professor Willard Humphreys in memory of Mary Cunningham Humphreys, will be awarded to those members of the Junior class (Academic) who, having taken the regular German course for at least two years, shall, at the close of the second term, pass the best examination on the work of the term and on the life of the author whose works have been the principal subjects of the year's study.

STINNECKE PRIZE

The Stinnecke Foundation was established in 1870 by the will of the late Henry A. Stinnecke, of the class of 1861, and was supplemented by a bequest received in 1876 from his aunt, Miss Maria Stinnecke. The income is divided between the Stinnecke Scholarship of \$500 and the Maclean Prize of \$100.

The Stinnecke Scholarship, of the annual value of \$500, tenable during the undergraduate course, unless forfeited

by neglect of study, "will be given to that person who, having entered the Sophomore class, shall pass the best examination at the opening of the session in September, 1905, in the Odes of Horace, the Eclogues of Virgil, and the Latin Grammar and Prosody, as well as the Anabasis or Cyropædia of Xenophon and the Greek Grammar." Students of the University who have been members of the Freshman class, as well as new students entering the Sophomore class, will be admitted to such examination. The committee of examiners is appointed by the Board of Trustees.

CLASS OF 1861 PRIZE

The interest of \$1,200, given by the Class of 1861, will be awarded to the member of the Sophomore class who shall pass the best examination at the end of the year on mathematics 5, 7, 8.

FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE

This prize, the yearly interest of \$500, will be given to that member of the Sophomore class, not below the fourth group in his English studies, who in the judgment of a committee appointed by the Faculty, shall write the best English essay of the year.

CLASS OF 1870 SOPHOMORE ENGLISH PRIZE

This prize, the yearly interest of \$1,000, will be given to that member of the Sophomore Academic class who shall pass the best examination on the English studies of the year

ENDOWED SCHOLARSHIPS

The first scholarships were established in 1854. Between that time and 1903 one hundred and eleven scholarships, of the gross value of one hundred and thirteen thousand dollars, have been endowed. The ELIZABETH VAN CLEVE SCHOLARSHIP may be assigned to a student in the School of Science. The income from all other scholarships, founded prior to June, 1903, is for the benefit of students in the Academic Department.

FOUNDED PRIOR TO 1903

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| 1-3. | The COLT Scholarships,
founded by Roswell Colt, Esq., of Paterson,
N. J., | \$3000 |
| 4. | The NEWKIRK Scholarship,
founded by Matthew Newkirk, Esq., of Phila-
delphia, | 1000 |
| 5. | The JOHN JOSEPH RANKIN Memorial Scholarship,
founded by his father, Wm. Rankin, Esq., of
Newark, N. J., | 1000 |
| 6. | The CRESSWELL Scholarship,
founded by A. Cresswell, Esq., of Kishaco-
quillas, Pa., | 1000 |
| 7. | The ISAAC R. RANKIN Scholarship,
founded by Isaac R. Rankin, Esq., of Newark,
N. J., | 1000 |
| 8. | The MUSGRAVE Scholarship,
founded by Rev. George W. Musgrave, D.D., | 1000 |
| 9. | The COGSWELL Scholarship,
founded by Rev. Jonathan Cogswell, D.D., | 1000 |
| 10. | The GREEN Scholarship,
founded by Hon. Henry W. Green, LL.D., | 1000 |

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| 11-15. | The LENOX Scholarships,
founded by James Lenox, Esq., of New York, | 5000 |
| 16. | The HODGE Scholarship,
founded by Dr. Hugh L. Hodge, of Philadelphia, | 1000 |
| 17. | The A. B. BAYLIS Scholarship,
founded by A. B. Baylis, Esq., of Brooklyn, | 1000 |
| 18. | The HENRY J. VAN DYKE Scholarship,
founded by Geo. L. Sampson, Esq., of Brooklyn, | 1000 |
| 19. | The GREGORY Scholarship,
founded by Dudley S. Gregory, Esq., of Jersey
City, | 1000 |
| 20. | The FIRST PRESBYTERIAN CHURCH OF PEEKSKILL
Scholarship, founded by members of the Church, | 1000 |
| 21. | The VAN VORST Scholarship,
founded by Hon. John Van Vorst, of Jersey City, | 1000 |
| 22. | The JANEWAY Scholarship,
founded by Rev. Jacob J. Janeway, D.D., | 1000 |
| 23. | The PRESBYTERIAN CHURCH OF HUNTINGTON,
L. I., Scholarship, founded by the ladies of the
Church, | 1000 |
| 24. | The BACKUS Scholarship,
founded by E. F. Backus, Esq., of Philadelphia, | 1000 |
| 25. | The VAN SINDEREN Memorial Scholarship,
founded by Mrs. and Miss Van Sinderen of
Brooklyn, | 1000 |
| 26. | The NORRIS HALSTEAD Scholarship,
founded by Gen. N. Norris Halstead of Newark,
N. J., | 1000 |
| 27. | The MACLEAN Scholarship,
founded by Drs. John and George M. Maclean, | 1000 |
| 28. | The HAINES Scholarship,
founded by Richard T. Haines, Esq., of Eliza-
beth, N. J., | 1000 |
| 29. | The JACKSON Scholarship,
founded by Hon. John P. Jackson, of Newark,
N. J., | 1000 |
| 30. | The TUTTLE Scholarship,
founded by Joseph N. Tuttle, Esq., of Newark,
N. J., | 1000 |
| 31. | The GERTRUDE N. WOODHULL Memorial Schol-
arship, founded by her son, Dr. John N. Wood-
hull of Princeton, | 1000 |

32. The NATHANIEL W. TOWNSEND Memorial Scholarship, founded by his daughter, Mrs. Daniel Haines, 1000
33. The FIRST PRESBYTERIAN CHURCH OF BRIDGETON Scholarship, founded by members of the Church, 1000
34. The SKIDMORE Scholarship, founded by Joseph R. Skidmore, Esq., of New York, 1000
35. The SPENCER Scholarship, founded by I. S. Spencer, Esq., 1000
36. The JEREMIAH D. LALOR Memorial Scholarship, founded by a friend, 1000
37. The MARQUAND Scholarship, founded by Frederick Marquand, Esq., of Southport, Conn., 1000
38. The FIRST PRESBYTERIAN CHURCH OF TRENTON Scholarship, founded by members of the Church, 1000
39. The CAMERON Scholarship, founded by Hons. Simon and Donald Cameron, 1000
40. The SECOND PRESBYTERIAN CHURCH OF ELIZABETH Scholarship, founded by members of the Church, 1000
41. The C. S. BAYLIS Scholarship, founded by Charles S. Baylis, Esq., of Brooklyn, 1000
42. The ELIZA MUSGRAVE GIGER Memorial Scholarship, founded by her son, Prof. George M. Giger, D.D., 1000
43. The BLAIR Scholarship, founded by James Blair, Esq., of Scranton, Pa., 1000
44. The PENNINGTON Scholarship, founded by Dr. Samuel H. Pennington of Newark, N. J., 1000
45. The FENTON Scholarship, founded by Aaron Fenton, Esq., 1000
46. The TRASK Scholarship, founded by Alanson Trask, Esq., of Brooklyn, 1000
47. The WITHINGTON Scholarship, founded by Chandler Withington, Esq., of Kingston, N. J., 1000
48. The NEWARK Scholarship, founded by the will of Henry Rogers, Esq., of Newark, N. J., 1000

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| 49. | The CARTER Scholarship,
founded by Aaron Carter, Esq., of Newark, N. J., | 1000 |
| 50-54. | The HOLMES Scholarships,
founded by Capt. Silas Holmes, of New York, | 5000 |
| 55. | The COLWELL Scholarship,
founded by Stephen Colwell, Esq., of Philadelphia, | 1000 |
| 56. | The AITKEN Scholarship,
founded by John Aitken, Esq., of New York, | 1000 |
| 57. | The BULLARD Scholarship,
founded by Mrs. P. Bullard, | 1000 |
| 58. | The NEHEMIAH PERRY Scholarship,
founded by the Hon. Nehemiah Perry of New-
ark, N. J., | 1000 |
| 59. | The CHARLES DICKINSON HAMILL Memorial Schol-
arship, founded by his father, the Rev. Samuel
M. Hamill, D.D., | 1000 |
| 60. | The CYRENIUS BEERS Memorial Scholarship,
founded by his daughter, Miss Julia Beers, | 1000 |
| 61. | The JACOBUS Scholarship,
founded by Peter Jacobus, Esq., of Newark,
N. J., | 1000 |
| 62. | The MATTHEW B. HOPE Scholarship,
founded by the Trustees as an acknowledgment
of the services of Prof. Hope in raising an endow-
ment of over \$100,000, | 1000 |
| 63. | The JOHN MACLEAN Scholarship,
founded by a friend of President Maclean, | 1000 |
| 64. | The WHITE Scholarship,
founded by William White, Esq., | 1000 |
| 65. | The ELIZABETH VAN CLEVE Scholarship,
founded by Hon. C. S. Green, of Trenton, N. J., | 1000 |
| 66. | The BLOOMFIELD Scholarship,
founded by Hon. Amzi Dodd of Bloomfield, N. J., | 1000 |
| 67. | The FLAGLER Scholarship Fund,
the gift of Henry M. Flagler, Esq., of New
York City, | 1500 |
| 68. | The JAMES MCCOSH Scholarship,
founded by friends of President McCosh in New
York City, | 1000 |
| 69-70. | The WISTAR MORRIS WOOD and CHARLES
MORRIS WOOD Scholarships, founded by their
father, Rev. Charles Wood, D.D., of German-
town, Pa., | 2000 |

71. The CLASS OF 1856 Scholarship,
founded by members of the Class of 1856, 1000
72. The CLASS OF 1841 Scholarship,
founded by members of the Class of 1841, 1000
73. The ALBERT DOLBROW Memorial Scholarship,
founded by his mother, Mrs. Susan D. Brown of
Princeton, N. J., 1000
- 74-83. The JONATHAN DICKINSON Scholarship,
The AARON BURR Scholarship,
The JONATHAN EDWARDS Scholarship,
The SAMUEL DAVIES Scholarship,
The SAMUEL FINLEY Scholarship,
The JOHN WITHERSPOON Scholarship,
The SAMUEL STANHOPE SMITH Scholarship,
The ASHBEL GREEN Scholarship,
The JAMES CARNAHAN Scholarship,
The FRANCIS L. PATTON Scholarship.
- 84-88. The KENNEDY Scholarships,
founded by Miss Rachel L. Kennedy, New York, 15,000
89. The A. O. HEADLEY Scholarship,
founded by A. O. Headley, Esq., of Newark, N. J., 1000
90. The HARVEY LINDSLEY Memorial Scholarship,
founded by Mrs. Emeline Coney Lindsley, 1000
91. The BUTLER Scholarship,
founded by William Allen Butler, Jr., Esq., 1000
92. The BROKAW Scholarship,
founded by Isaac V. Brokaw, Esq., of New York, 1000
93. The EZRA NYE Memorial Scholarship,
founded by his son-in-law, F. Wolcott Jackson,
Esq., of Newark, N. J., 1000
94. The GRACE NEWCOMBE DENNING Scholarship,
founded by Mrs. William Moir of New York, 1500
95. Founded by a friend, 1000
- 96-97. The MCCORMICK Scholarships,
founded by Mrs. McCormick of Chicago, 2000
98. The WILLIAM CAMPBELL TRUESDELL Memorial
Scholarship, founded by his father, Warren N.
Truesdell, Esq., of Newark, N. J., 1000
99. The HENRY M. ALEXANDER Scholarship,
founded by a friend, 1000
100. The JOHN C. D. MATTHEWS Memorial Scholar-
ship, founded by his mother, Mrs. Mary R. Mat-
thews of Newark, N. J., 1000

101. The McCORD Scholarship,
founded by J. D. McCord, Esq., of Philadelphia, 1000
- 102-106. The WALLACE Memorial Scholarships,
founded in memory of William C. Wallace of the
class of '23, by his daughters, Mrs. Allen and
Miss Wallace. of Newark, N. J., 5000
107. The ROBERT VOORHEES Scholarship,
founded by Mrs. Susan V. Clark, 1000
108. The J. S. BONSALE Scholarship,
founded by Mrs. Susan Bonsall, 1000
109. The LAURANCE FIELD STEVENS Memorial Schol-
arship, founded by his father, Herbert B.
Stevens, Esq., of Greenwich, Conn., 1000
- 110-111. The FINLEY AND BREESE Scholarships,
founded by a bequest from Samuel F. B. Morse, 2000

FOUNDED IN 1903

112. The MAHLON LONG Scholarship,
founded by the Rev. George Wells Ely, of
Columbia, Pa., 10,000
113. The JOHN LINN PATTON Scholarship,
founded by Mr. and Mrs. William A. Patton in
memory of their son, John Linn Patton, of the
class of 1903, 2500

At their meeting in June, 1903, the Trustees adopted the following rules for the endowment and administration of scholarships:

I. A scholarship in any undergraduate department of the University may be endowed by the payment to the Treasurer of the sum of twenty-five hundred dollars.

II. A scholarship shall entitle the incumbent to receive remission of one hundred dollars per annum from the charge for tuition and public room fee.

III. The right to nominate the incumbent of a scholarship shall rest with the donor, if an individual, during his or her lifetime, and if an institution or alumni association, for a period of twenty-five years. At the end of this period or

at the death of the donor, the right of nomination shall revert to and rest with the Faculty of the University.

IV. All scholarships shall be held subject to such rules as may be adopted from time to time by the Faculty of the University.

FUNDS FOR CANDIDATES FOR THE MINISTRY

THE RICHARDS FUND.—A bequest by Mrs. Esther Richards of New York, amounting to \$2,970.32, for the benefit of candidates for the ministry. Received in 1790.

THE LESLIE FUND.—A bequest of James Leslie of New York, a graduate of the class of 1759, amounting to \$10,677.49, for "the education of poor and pious youth with a view to the ministry of the Gospel in the Presbyterian Church." Received in 1792.

THE HODGE FUND.—A bequest of Hugh Hodge of Philadelphia, of a house and lot on Market street, above Second (No. 205), "to be held by the Trustees in trust, to lease out from time to time, and the rents to be applied to the support and education of pious youth for the ministry." Received in 1805. The net income for the current year will amount to about \$750.

Applications for aid from the funds for candidates for the ministry should be made to Mr. Charles W. McAlpin, Secretary of the University.

CHARITABLE FUND

THE VAN ARSDALE FUND.—A bequest of Robert Van Arsdale of Newark, N. J., of the class of 1826, amounting to \$3,000, "in trust for promoting charitable instruction in

the College of New Jersey, according to the discretion of the Faculty." Received in 1875.

Applications for aid from the Van Arsdale Fund should be made to Professor Henry B. Fine, Dean of the Faculty.

PECUNIARY AID

In order that deserving students of insufficient means may be enabled to secure a college education, it is customary for the Faculty to remit the sum of one hundred dollars per annum from the charge for tuition and public room fee of students in the Academic Department, who present satisfactory testimonials as to scholarship and character and proof that the assistance is absolutely needed.

Remission is granted in all cases for one year, and will be continued if the following conditions have been complied with:

I. If the recipient has maintained a stand in one of the first three groups of his class.

II. If he has been regular in attendance at his college exercises and free from censure or discipline.

III. If he has practised strict economy.

A student whose college bill for the previous year has exceeded \$350 will be considered able to pay full tuition.

These conditions also apply to applicants who have been students in the University for one year or more.

The amount of tuition remitted is to be regarded as a loan, to be repaid to the University when it can be done without serious financial embarrassment.

For application blanks and further information apply to Mr. Charles W. McAlpin, Secretary of the University.

EXPENSES

Board, 36 weeks	\$ 3.00 to \$7 per week.
Washing, 36 weeks	60 cents per week.
Tuition and public room fee, Academic	150.00 per annum.
Tuition and public room fee, School of Science	160.00 per annum.
Tuition, extra, for each of Academic Chemical courses 5, 6, 7, 9, 10, and 12	10.00 per term.
Room rent (according to location of rooms)	18.00 to \$175 per annum.
Heat, fixed charge (according to location of rooms)	8.00 to \$30 per annum.
Light, fixed charge (according to location of rooms)	9.00 to \$18 per annum.
Infirmary fee	7.00 per annum.
Gymnasium and Swimming Pool fee	7.00 per annum.
Matriculation fee, payable on entrance	5.00
Graduation fee, payable second term, Senior year	12.00

For other special courses than that in Analytical Chemistry arrangements may be made upon consultation with the professor in charge.

Apparatus Deposits.—Students pursuing certain courses in the School of Science are required to make deposits to pay for apparatus injured or destroyed. At the end of the term any excess in favor of the student is placed to his credit on the bill for the next term. The deposits in the courses are: Freshmen, second term, Geodesy, \$10; Sophomores, second term, Geodesy, \$15; second term, Chemistry, \$8. Juniors, first term, Geodesy, \$10; Chemistry, *c*, \$12; second term, Geodesy, \$10. Seniors, first term, Geodesy, \$5; Chemistry, *c*, \$15; Chemistry, *g*, \$12; second term, Chemistry, *c*, \$10.

Students taking any of the courses in Graphics will require a drafting outfit costing from \$18 to \$25.

Academic students taking laboratory courses in Chemistry are required to make apparatus deposits as follows: Chemistry 5, \$10; Chemistry 6, \$10; Chemistry 7, \$6; Chemistry 9, \$15; Chemistry 10 and 14, either singly or together, \$15.

ESTIMATE OF ANNUAL EXPENSES

ACADEMIC DEPARTMENT

Minimum, moderate and maximum estimates of the necessary expenses for a student occupying an unfurnished room in a dormitory for one year have been prepared as follows:

	Min.	Medium	Max.
Board, 36 weeks, at \$3.00 to \$7.00	\$108.00	\$180.00	\$252.00
Washing, 36 weeks at 60 cents per week	21.60	21.60	21.60
Tuition and Public Room fees	150.00	150.00	150.00
Infirmary fee	7.00	7.00	7.00
Gymnasium and Swimming Pool fee	7.00	7.00	7.00
Matriculation fee (on entrance)	5.00	5.00	5.00
Room Rent	18.00	60.00	175.00
Heat	8.00	20.00	30.00
Light	9.00	14.00	18.00

Books, clothes, furnishings for room, incidentals, travelling and vacation expenses have not been included in these estimates.

UNIVERSITY BILLS

All University expenses, including board, must be paid in advance to the Treasurer of the University.

Students are required to call at the Treasurer's office in the course of the first ten days of each term, and to give information as to their place of boarding, etc., so that their bills can be made out. All bills must be paid within the first four weeks of the term. Failure to comply with this rule will deprive the student of the privileges of the University until payment is made, unless excused by special vote of the Faculty.

When a student enters the University before the middle of the term, he shall pay in full the usual charges for that term, with the exception of the charges for board; if he

enter after the middle of the term, he shall pay one-half. For board he shall pay in proportion to the time.

When a student leaves the University, whether voluntarily or by dismissal, before the middle of any term, one-half of the charges for tuition and public rooms for that term shall be refunded. But in the case of temporary absence and subsequent return, although the absence be for more than half a term, no such rebate shall be granted.

When a student is dismissed from the University for any cause, the advance deposit for board, fuel, and gas, beyond the time of dismission, shall be refunded to his parent or guardian.

When at the end of the first term the amount of the advance deposit proves to be in excess of the sum required to defray the board or room bills of any student, the excess shall be credited on his bill for the next term. At the end of the academic year the amounts overpaid by the members of the *graduating class* for board, room rent, fuel, or gas shall be refunded by the Treasurer to the student's parent or guardian. The parent or guardian of *every undergraduate* will be advised of the amount of excess to the credit of his son or ward, and such amount will be *carried over to his credit on the bill of the first term of the following year*. In case of withdrawal or dismissal from the University of any undergraduate, at the end of the college year, such excess will be refunded by the Treasurer to the parent or guardian, when informed by the Clerk of the Faculty that such undergraduate has been withdrawn or dismissed from the University.

RULES GOVERNING THE ALLOTMENT AND RENTAL OF ROOMS

(DECEMBER, 1901)

1. Rooms shall be assigned for occupation during the following academic year between the 15th of May and the 1st of June of each year.

2. This assignment shall embrace:

a. All rooms occupied by students whose connection with the University will terminate at the end of the academic year.

b. The rooms of all Seniors, whether with room-mate or not (unless the room may be retained by a graduate or for a brother, as elsewhere provided in the rules).

c. All rooms for which the lease has not been properly renewed.

3. An allotment may also take place at the close of the first term of each academic year for the purpose of assigning such rooms as may then fall vacant.

4 *a.* The assignment of rooms shall in all cases not herein specially excepted take place in such a manner that specific rooms shall be assigned by lot.

b. The rooms to be assigned shall be classified according to the amount of their rental in seven groups as follows:

(1) The first group shall embrace rooms whose rental is from \$18 to \$36 inclusive.

(2) The second group shall embrace rooms whose rental is from \$40 to \$66 inclusive.

(3) The third group shall embrace rooms whose rental is from \$70 to \$100 inclusive.

(4) The fourth group shall embrace rooms whose rental is from \$105 to \$140 inclusive.

(5) The fifth group shall embrace rooms whose rental is from \$150 to \$180 inclusive.

(6) The sixth group shall embrace rooms whose rental is from \$200 to \$240 inclusive.

(7) The seventh group shall embrace rooms whose rental is from \$250 to \$300 inclusive.

c. The applicants for rooms shall be divided into corresponding groups, each applicant being required to inform the Treasurer in writing before the 10th of May, or the 20th of January, as the case may be, both of his intention to enter the drawing and of the group in which he wishes to be placed.

Every applicant for a room shall agree beforehand, and shall be required, to take the room which may be assigned to him by lot in the group in which he has made application.

d. Each drawing shall begin with the first group and proceed from that group through the other groups successively in the order given above. Any applicant who does not obtain a room in the group to which he first asked to be assigned, may be allowed to draw in any higher group.

e. If there be any rooms remaining unassigned after a drawing, such rooms may be assigned by subsequent allotment, at such time before the end of the year or of the term as the Treasurer may appoint; such supplementary allotment to be made under the same rules as the principal allotment, with this exception, that the rooms disposed of by means of it may be classified as above or not, at the discretion of the Treasurer.

f (a). Priority in the drawing shall be determined by the length of time the applicants have been members of the University. The first drawing shall include the names of all applicants who have been members of the University for more than one year. A second drawing shall include the

names of all applicants who have been members of the University one year or less.

f (b). If the application for a double room shall be signed by students who have been members of the University different lengths of time, it shall be classified and placed in the drawing in which the student who has been a member of the University the shortest length of time would be placed.

g. New students shall have choice of any rooms remaining vacant at the time of their entering upon residence, in the order of their application after undergoing the entrance examinations for full standing, upon condition of immediately signing the lease required in all cases. [See Rule 5 *a.*]

h. Double rooms shall be separately classified and allotted in accordance with the above regulations. Only such suites as consist of a study and two bedrooms shall be considered double rooms within the meaning of this clause. No double room shall be assigned to a single individual, nor shall it be within the privilege of any single individual to draw for a double room. Every application for a double room must give the names of two persons who intend to occupy the room together and who undertake to be jointly responsible for the rent of the same.

i. Whenever for any reason, one of the occupants of a double room is permitted or obliged to cancel his room lease, the remaining occupant must vacate the room at the end of the current academic term, unless he agrees to pay the whole rent, or provide a room-mate who shall join him in signing a new lease for the remainder of the academic year.

5 *a.* The tenure and liabilities of those to whom rooms are assigned under these rules shall be the tenure and liabilities expressed in the following lease, which must be signed in the case of each room allotted by the student who is to occupy it, and by his parent or guardian. This lease

must be signed and delivered to the Treasurer in each case within ten days of the allotment, except in the case of new students, provided for under Rule 4 g.

This agreement, made the day of , 190 , between the Trustees of Princeton University and of , witnesseth, that the said Trustees of Princeton University do hereby lease unto the said Room No. in the Entry of , to hold for the academic year of , paying therefor during the said term unto the said Trustees of Princeton University the yearly rent of \$ in two equal payments, to be made, the one within the first four weeks of the first term of the academic year, the other within the first four weeks of the second term of the academic year.

And the said covenants to pay the said rent in the manner and at the times aforesaid and to deliver up the said premises to the said Trustees of Princeton University or its legal representative at the end of said term in as good condition as the same now are or may be put into by the said Trustees of Princeton University, reasonable use and wear and tear thereof, and fire and other casualty excepted. The said lessee also covenants that he will not do or suffer to be done any damage in the leased premises, and that, if any damage beyond reasonable wear and tear be done, he will cause the same to be made good as soon as possible at his own expense, employing for that purpose the proper University workmen, and paying the cost thereof at once to the University Treasurer, it being understood that the damage here meant includes the breakage of glass and locks, whether by accident or design. The said lessee further covenants that he will not sublet the same or any part thereof nor permit any other person or persons to occupy the same or any part thereof, nor make nor suffer to be made any alteration therein without the consent of the said Trustees of Princeton University for that purpose in

writing first had and obtained. And the said lessee further covenants that the said Trustees of Princeton University through their authorized representative may enter the said premises for the purpose of viewing or making improvements therein at any reasonable times in the day time, or at any other time for the legitimate purposes of University discipline. This lease is made on the express condition that it may be terminated by said Trustees through their representative.

b. Any occupant of a college room may retain his room until the end of his undergraduate or graduate course, provided he annually notify the Treasurer of his intention of retaining it and sign a new lease before the 1st of May, otherwise his room shall be considered vacant and shall be included in the next allotment. In case an occupant of a double room be left without a room-mate at the end of the academic year, he may renew his lease upon condition of naming another student of the University who will become joint lessee with him for the following year, unless the room-mate who leaves is a Senior or a fourth year special. It shall also be the privilege of any occupant of a college room to renew his lease at the end of his own tenure in the name of his brother, when that brother is to enter the University immediately.

c. The right to occupy a room is not transferable and terminates with the expiration of the lease. Any attempt on the part of the occupant of a college room to sell or transfer, directly or indirectly, his right of occupancy shall be deemed a fraudulent transaction, and will be dealt with by the Faculty as a grave breach of University law.

d. The occupant of a college room shall deposit with the Treasurer the sum of 25 cents for each key to his room that may be furnished him by the University; and all amounts paid under this clause shall be refunded upon return of the key or keys furnished.

6. Students vacating college rooms shall be allowed to store any furniture not disposed of in a room designated by the University authorities, under the charge of a salesman appointed by the University, where it may be offered for sale. Furniture remaining unsold at the end of four months after the date of storing shall be disposed of at public auction to the highest bidder.

7. No exchange of rooms shall be allowed unless formally sanctioned in writing by the Treasurer; and then only upon terms explicitly stated in a written application signed by both parties to the proposed exchange, and not in contravention of the spirit of these rules. Such applications shall be kept on file in the Treasurer's office.

The Committee on Grounds and Buildings shall engage a competent appraiser, not otherwise connected with the University, to determine the value of all furniture and contents for sale in a room to be vacated or transferred. His decision shall be final in every appraisal. Under the general direction of the Treasurer, it shall be the duty of the appraiser to estimate separately the value of each article so offered for sale and to deposit with the Treasurer a complete list for each room of the articles appraised, with their several values affixed. The owner shall not be permitted, under any pretext, to sell to his successor any article for more than the appraised valuation. If he does not wish to sell at so low a price, then he must remove his property from the room. If his successor does not wish to purchase at appraised valuation, he may order that the property be removed from the room. All payments for the furniture or contents of a room vacated or transferred must be made through the Treasurer's office, but nothing in these rules shall be construed to create a liability on the part of the University for damaged or missing articles.

8. When rooms are vacated during a term the rent shall be paid until the end of the term. An occupant of a college

room who expects to be absent on leave for a term may be released from the obligations of his lease, provided he notify the Treasurer before the beginning of the term during which he expects to be absent, and give up the room ; but no abatement or drawback of room rent shall be allowed for any period less than a term, except in special cases, to be stated in writing, and by permission of the Treasurer.

9. The Faculty of the University is directed to suspend or expel every student that may be found guilty of breaking or evading these rules or of injuring or interfering with the person or property of his successor in a room ; or of aiding or abetting another in such transgression, evasion, injury or interference. The Faculty and all its officers are instructed to take the utmost pains, by ordinary or extraordinary means, to discover such offenders and prevent such offences.

The Faculty is further instructed to report, with the evidence discovered, the name of any graduate or outsider that may be guilty of such offenses to the Committee on Grounds and Buildings; and said Committee is authorized and directed to procure legal counsel and, when the evidence seems to justify it, to take appropriate legal proceedings against any and every offender before a court of law.

The Registrar of the University is instructed, under the supervision of the last said committee, to have these regulations incorporated in a set of amended rules and printed in a neat pamphlet, and to send copies to all parents and guardians, either of students now in the University, or of applicants for admission.

PART V

DEGREES AND HONORS—1902-1903

DEGREES AND HONORS CONFERRED

1902-1903

DEGREES

HONORARY DEGREE, CONFERRED OCTOBER, 1902

LL.D.—His Excellency, Franklin Murphy, Governor of New Jersey.

DEGREE IN COURSE, CONFERRED DECEMBER, 1902

C.E.—Frederick Warner Allen, as of the class of 1894.

HONORARY DEGREES, CONFERRED JUNE, 1903

LL.D.—William Milligan Sloane, Ph.D., L.H.D., LL.D., Seth Low
Professor of History in Columbia University.

William Earl Dodge, Esq., of New York City, "in absentia."

Litt.D.—Hiram Corson, A.M., LL.D., Professor of English Literature
in Cornell University.Thomas Frederick Crane, '64, Dean of the University Faculty
and Professor of the Romance Languages and Literatures in
Cornell University.

A.M.—Frank Calvin Roberts, C.E., '83.

Frank Sheldon Fosdick.

DEGREES IN COURSE, CONFERRED JUNE, 1903

DOCTOR OF PHILOSOPHY (*Ph.D.*) . . . 1Archer Everett Young, *Wesleyan*, 1898.MASTERS OF ARTS (*A.M.*) . . . 44

Louis Clark Vanuxem, 1879,

Malcolm Campbell, 1882,

Frederick Stanton Elder, 1893,

Charles William Ottley, 1893,

Malcolm Lloyd, Jr., 1894,

Philip Hudson Churchman, 1896,

Ezra Parmelee Prentice, 1898,

Edmund Bayly Seymour, Jr., 1898,

Wilson Thomas Moore Beale, 1899,

William Averill Cleland, 1899,

Garrett Stephen Voorhees, 1899,

Homer White Taylor, 1900,

Harry Laity Bowlby, 1901,

Edward Glassmeyer, 1901,

Frank Latimer Janeway, II, 1901, Frank Pierce McDermott, Jr. 1902,
 Howell North White, 1901, Charles Merrill Merwin, 1902,
 Raymond Gould Brush, 1902, Walter Phillips, 1902,
 Jasper Hewlett Dodd, 1902, Arthur Julian Pilgram, 1902,
 Harry Frank Stambaugh, 1902.

Oliver Paul Barnhill, *Centre*, 1900.
 Robert Andrew Blair, *Geneva (Pa.)*, 1901.
 Wallace McCook Cunningham, *Roanoke*, 1902.
 Ernest Freeman Hall, *Michigan*, 1894.
 George Monroe Howerton, *Furman*, 1900.
 William Clement Isett, *Lafayette*, 1901.
 John Robert Landsborough, *Macalester*, 1900.
 Walker Eugene McBath, *Tennessee*, 1898.
 Albert Joseph McCartney, *Wisconsin*, 1900.
 Walter Rue Murray, *Wooster*, 1899.
 Hugh Watson Rendall, *Lincoln*, 1900.
 Harry Baldwin Roberts, *Centre*, 1900.
 Ephraim Cutler Shedd, *Marietta*, 1893.
 James Beck Shropshire, *Georgetown*, 1902.
 Charles Wesley Sidebotham, *Alma*, 1901.
 William T. Sherman Seyfert, *Lafayette*, 1896.
 Alexander Smith, *Dalhousie*, 1895.
 John Roger Thomas, *Ripon*, 1901.
 John Edwin Triplett, Jr., *Hampden-Sidney*, 1900.
 Gerrit Verkuy, *Park*, 1901.
 Carroll Harvey Yerkes, *Lafayette*, 1901.

MASTERS OF SCIENCE (M.S.) . . . 3

Frank Duncan Graham, B.S., 1899.
 Walter Lyman Upson, B.S. 1899, E.E. 1902.
 Robinson Pierce, Jr., Ph.B. *Brown*, 1902.

BACHELORS OF ARTS (A.B.) . . . 154

John Leon Acheson,	William Giffin Barr,
Cyrus Hall Adams, Jr.,	William Baylis, Jr.,
Howard Wilmurt Ameli,	Charles Ezra Beury,
Samuel Anders Anders,	David Stuart Bingham,
Robert Patton Anderson,	William Hildreth Blakeman,
Chase Andrews, Jr.,	James Walter Boyd,
John Gassaway Armstrong,	James Day Brownlee, Jr.,
Sinclair Howard Armstrong,	Robert Burkam,
Roderic Barbour Barnes,	Robert Candee,

Shirley Niles Carr,
James Porter Cassidy,
Ward Bryan Chamberlin, Jr.,
George Harold Perry Cheney,
Avent Childress,
Gilbert Fairchild Close,
Kenneth McPherson Coolbaugh,
James Sprague Conrad,
George Stribling Couch, Jr.,
John Swift Dana,
Leroy Landis Daniel,
Charles Whitney Darrow,
Arthur Tyrrell Dear,
Harry Ryerson Decker,
William Sanderson Detwiler,
Norman Henderson Donald,
Charles Horatio Dugro,
Remick Carpenter Eckardt,
Gustavus William Faber,
Frederick Cole Fairbanks,
Wallace Radcliffe Ferguson,
John Clark Finney,
Sheldon Franklin,
McIntyre Fraser,
Karl Telford Frederick,
Halstead Gurnee Freeman,
Clarence Arthur Garbrick,
Leland Beekman Garretson,
Robert Wilds Gilchrist,
Le Grand Cannon Griswold,
Otto Anthony Hack,
Charles Waite Hall,
Lot Myrick Morrill Hamlin,
John Henry Hankinson,
Edgar Herbert Havens,
William Dougal Herr,
Charles Conrad Hewitt,
Paxton Pattison Hibben,
Sam Higginbottom,
James Buren Higgins,
Isaac Hilliard,
Morris Miller Hildebeitel,

Walter Franklin Hollenbach,
Herbert Webb Hopkins,
Archibald Alexander Howell,
Corwin Howell,
Arthur Stanley Hull,
Floyd Hurlbut,
Charles K. Imbrie,
John Ireland,
William Richard Janeway,
Henry Thomas Kays,
Cadwell Benson Keeney,
Edward Prentiss Knox,
Evert Ostrander Lansing,
Philip Hoffman Lantz,
Louis William Layton,
Henry Goddard Leach,
Vivian Clark Leftwich,
Frank Hoyt Little,
Edwin Miller Loucks,
John James MacDonald,
Robert Charles McNamara,
Thomas S. McPheeters, Jr.,
Elmer Brown Mason,
Jerome Dudley Mason,
Arthur Ingersoll Meigs,
John Oliphant Merwin,
Benjamin Edmund Messler,
James Roberts Miller,
Raymond Boileau Mixsell,
George Harold Nevius,
William Augustus Newell,
Gustavus Ober, Jr.,
Edward Albert Odell,
William Schuyler Pate,
Ellis Lynford Pierson,
Thomas Fitzpatrick Plunkett,
Willard Hall Porter, Jr.,
Percy Rivington Pyne, 2nd,
Andrew Lawrence Randall,
Ralph Erskine Rearick,
Robert B. Reed,
Arthur Benjamin Reeve,

Charles Banes Reeves,	William Leslie Tally,
Humphrey Jones Rendall,	Malcolm Slicer Taylor,
Harvey Clayton Rentschler,	Thomas Lewis Thomas,
Charles Spencer Richardson, Jr.,	William Balch Todd, Jr.,
Thad Weed Riker,	Walter Knapp Tompkins,
August Roche, Jr.,	Charles Townsend, Jr.,
Daniel Miner Rogers,	William Potter Van Tries,
William Bacon Roys,	Erwin Vogelsang,
Norman Craig Schenck,	John Martin Wabeke,
Albert Bigelow Schultz,	James Henry Walker,
Harry Christian Schweikert,	Otis Lawrence Walker,
Garfield Scott,	John Hankins Wallace, Jr.,
George Tressler Scott,	Gardiner Watkins,
Edward Wallace Scudder,	Harry Calvin Weaver,
Walter Foote Sellers,	John Paul Welling,
George Carlton Shafer,	Glenn Carlton Wharton,
Robert Williams Singer,	Charles Osborne Wheeler,
William Allen Sipe, Jr.,	Robert Daniel Williams,
Jay Fletcher Slee,	William Arnot Wilson,
Albridge Clinton Smith, Jr.,	William Lawrence Wilson,
Charles Carroll Smith,	Charles Montgomery Wood,
Frank Smith,	Franklin Loch Wright,
John Ewing Steen,	Harry Hall Wright,
Harris Bates Stewart,	Henry George Weston Young,
Paul Stratton,	Robert Spencer Young,
Paul Mitchell, as of the class of 1901,	
William Winston Roper, as of the class of 1902.	

ELECTRICAL ENGINEERS (*E.E.*) . . . 2

Eric Leonard Bergland,	Paul Brokaw,
B.S., Princeton, 1901.	B.S., Princeton, 1901.

BACHELORS OF SCIENCE (*B.S.*) . . . 52

James Cowen Ames,	Regis Chauvenet, 2nd,
Morgan Ashley,	John McFerran Clancy,
Clifford Rea Babson,	Blase Cole,
Charles Rohe Bauerdorf,	William Anderson Coulter,
George Bubb,	John Crawford, Jr.,
Edward Bush,	James Garfield Eddy,
Axtell Julius Byles,	Alexander Galt,
Tesaleo Ramon Cadenas,	Uri Balcom Grannis,
James Thompson Campbell, Jr.,	Harold Greene,

Hubert Vivian Guile,	Elliott Wilbur Pitkin,
Henry Fraser Harris,	Henry Call Reynolds,
Richard Englehart Herrmann,	Isaac Warner Roberts,
Sidney Tarzwell Holt,	Thomas Arthur Rutherford,
James Vandergrift Johnson,	Homer Scott,
Edwin Furness Leigh,	Jacob Sheasley,
Julius Max Lowenstein,	Clarence Earle Sterrett,
Earle Steele Lovett,	Alexander Stobo,
John Stuart McKaig,	Harry Augustus Strater,
Edward Thomas Moore,	Justus Stevens Templeton,
George Edward Munger,	Rudolph Ernest Tiedemann,
Courtlandt Nicoll,	Norman Spencer Welch,
John Stephen O'Neill,	Erastus Wells,
Edgar Palmer,	Harry Rhees Wilson,
George Paull,	Edward Bigelow Woods,
Forrest Garfield Pearson,	Charles Lewis Wrenn,
Harold Griffith Murray, as of the class of 1893,	
William Cooper Proctor, as of the class of 1883.	

CIVIL ENGINEERS (C.E.) . . . 23

James Wood Ames,	John Agee Jess,
Robert Earle Anderson,	John Coleman Long,
David Baird, Jr.,	Arthur Scranton Morris,
Robert Rogers Cassily,	Norman Bruce Pitcairn,
Henry Morgan Cooper,	Paul Justus Ralph,
Charles Lee Doe,	Arthur Pierce Robinson,
Joseph Conrow Field,	Leland Hamilton Ross,
Douglas Gorman,	Alexander Speer,
Albert Gross,	Lawrence Sullenberger,
Charles Houchin Higgins,	Frank Carmany Wallower,
George Wilcox,	
Norman Bruce Armstrong, as of the class of 1901,	
Paul Townsend Jones, as of the class of 1902.	

HONORS—1902-1903

COMMENCEMENT HONORS FOR GENERAL
EXCELLENCE

ACADEMIC SENIOR HONORMEN

FIRST GROUP—*Magna cum laude*

Gilbert Fairchild Close,	Benjamin Edmund Messler,
Harry Ryerson Decker,	Arthur Benjamin Reeve,
Corwin Howell, <i>Valedictory</i> ,	Frank Smith, Latin Salutatory
Henry Goddard Leach,	Robert Daniel Williams.

SECOND GROUP—*Cum laude*

Cyrus Hall Adams, Jr.,	Ralph Erskine Rearick,
Samuel Anders Anders,	Robert B. Reed,
Robert Patton Anderson,	Charles Spencer Richardson, Jr.,
Sinclair Howard Armstrong,	Thad Weed Riker,
William Giffin Barr,	August Roche, Jr.,
Robert Candee,	Harry Christian Schweikert,
John Clark Finney,	Edward Wallace Scudder,
Karl Telford Frederick,	George Carlton Shafer,
Charles Conrad Hewitt,	William Allen Sipe, Jr.,
Paxton Pattison Hibben,	Charles Carroll Smith,
Walter Franklin Hollenbach,	Harris Bates Stewart,
Archibald Alexander Howell,	John Martin Wabeke,
Floyd Hurlbut,	Harry Calvin Weaver,
John Oliphant Merwin,	Glenn Carlton Wharton,
George Harold Nevius,	Henry George Weston Young.

THIRD GROUP

John Leon Acheson,	Remick Carpenter Eckardt,
John Gassaway Armstrong,	Gustavus William Faber,
William Baylis, Jr.,	William Dougal Herr,
John Swift Dana,	Sam Higginbottom,
Leroy Landis Daniel,	Morris Miller Hildebeitel,

Charles K. Imbrie,
Evert Ostrander Lansing,
Frank Hoyt Little,
Jerome Dudley Mason,
James Roberts Miller,

George Tressler Scott,
Walter Foote Sellers,
Thomas Lewis Thomas,
Walter Knapp Tompkins,
Walter Arnot Wilson.

SCHOOL OF SCIENCE SENIOR HONORMEN

B.S. COURSE

SECOND GROUP—*Honors*

John Crawford, Jr.,
Hubert Vivian Guile,

Sidney Tarzewell Holt,
George Edward Munger,
Thomas Arthur Rutherford.

THIRD GROUP

Edward Bush,
Blase Cole,

Harold Greene,
Courtlandt Nicoll,
Elliott Wilbur Pitkin.

C.E. COURSE

FIRST GROUP—*High Honors*

Robert Earle Anderson.

SECOND GROUP—*Honors*

Charles Lee Doe,
Charles Houchin Higgins,
John Coleman Long,

Paul Justus Ralph,
Arthur Pierce Robinson,
George Wilcox.

THIRD GROUP

Albert Gross,

Alexander Speer.

ACADEMIC SENIOR SPECIAL HONORS

PHILOSOPHY. *High Honors*—William Dougal Herr, Robert Daniel Williams. *Honors*—Leroy Landis Daniel, John Clark Finney.

HISTORY, JURISPRUDENCE AND POLITICS. *High Honors*—Cyrus Hall Adams, Jr., Sinclair Howard Armstrong, William Baylis, Jr., Robert Burkam, Corwin Howell, Henry George Weston Young.

CLASSICS. *High Honors*—Robert Patton Anderson, Gilbert Fairchild Close, Benjamin Edmund Messler, Frank Smith.

ENGLISH. *High Honors*—Charles Conrad Hewitt, Henry Goddard Leach, Harry Christian Schweikert. *Honors*—Walter Franklin Hollenbach.

MODERN LANGUAGES. *High Honors*—Paxton Pattison Hibben.
Honors—Floyd Hurlbut.

MATHEMATICS. *High Honors*—Henry Goddard Leach, Harvey Clayton Rentschler.

SCHOOL OF SCIENCE SENIOR SPECIAL HONORS

PHYSICAL SCIENCE. *High Honors*—John Crawford, Jr., Sidney Tarzewell Holt, Thomas Arthur Rutherford. *Honors*—Harold Greene.

FELLOWS

(For names of Fellows, see page 35.)

SENIOR PRIZEMEN

ALEXANDER GUTHRIE MCCOSH PRIZE

John Clark Finney, with honorable mention of Leroy Landis Daniel.

LYNDE PRIZE DEBATE

First, Paxton Pattison Hibben,

Second, Axtell Julius Byles,

Third, Robert Candee.

LYNDE DEBATERS

From the American Whig Society

Robert Candee,

Paxton Pattison Hibben,

John Ewing Steen.

From the Clisophic Society

Axtell Julius Byles,

Frank Hoyt Little,

Robert B. Reed.

BAIRD PRIZEMEN

Baird Prize—Charles C. Hewitt.

Poetry—Paxton Pattison Hibben.

Oratory—Axtell Julius Byles.

Disputation, First—Robert B. Reed,

Delivery—Robert Candee.

Second—Frank H. Little.

CLASS OF 1859 PRIZE IN ENGLISH LITERATURE

Henry Goddard Leach.

GEORGE POTTS BIBLE PRIZES

Not awarded.

LYMAN H. ATWATER PRIZE IN POLITICAL SCIENCE

Arthur Benjamin Reeve, with honorable mention of Walter Knapp
 Tompkins.

FREDERICK BARNARD WHITE PRIZE IN ARCHITECTURE

Samuel Anders Anders.

THEODORE CUYLER PRIZE IN ECONOMICS

Karl Telford Frederick.

CLASS OF 1869 PRIZE IN ETHICS

Robert Daniel Williams.

NEW YORK HERALD PRIZE

Corwin Howell.

C. O. JOLINE PRIZE IN AMERICAN POLITICAL HISTORY

Not awarded.

ACADEMIC JUNIOR HONORMEN

First Group

D. M. Austin,

D. G. Barr.

Second Group

G. W. Arms, Jr.,	W. A. Clark,	J. B. Lichtenberger,
D. V. Ashley,	M. D. Cole,	P. J. G. Miller,
E. S. Atwater, Jr.,	M. J. Cook,	P. A. Moore,
G. T. Bispham, Jr.,	G. C. Crampton,	S. L. Moore,
L. G. Bissell,	D. J. S. Day,	E. B. Morrow,
S. B. Booth,	W. L. Hartman,	T. H. Sammis,
J. T. Boyd,	G. S. Hornblower,	A. P. Scott,
Roberts Brokaw,	J. K. Hosack,	C. W. Shearer,
T. F. Carter,	W. S. Katzenbach,	D. E. Wagner,
J. H. Cecil,	W. C. Kerr,	Otto Wolf, Jr.,
J. W. Christie,	F. H. Krecker,	William Woods.

SCHOOL OF SCIENCE JUNIOR HONORMEN

B.S. COURSE

First Group

J. J. Forstall,

W. E. Hague.

Second Group

J. M. Bowyer,	Harold Dennis,
J. M. Buchanan,	Henry Frankel,
L. H. Conklin,	T. E. Hardenbergh, Jr.,
W. B. Cosgrave,	W. D. Williams.

C.E. COURSE

First Group

N. R. McLure.

*Second Group*F. S. McIlvaine,
H. M. Merrick, Jr.,A. M. Ogle, Jr.,
F. C. Smith.

JUNIOR PRIZEMEN

JUNIOR FIRST HONOR PRIZE

David Marshal Austin.

MACLEAN PRIZE

George Sandford Hornblower.

JUNIOR ORATOR MEDALS

First—George Sandford Hornblower, *Third*—Fraser Laughlin MacLeod,
Second—Ernest Wilson Riggs, *Fourth*—Graham Chambers Hunter.

COMPETING JUNIOR ORATORS

*From the Cliosophic Society*George Sandford Hornblower,
Fraser Laughlin MacLeod,
Ernest Wilson Riggs,
William Woods.*From the American Whig Society*James Henderson Duff,
Graham Chambers Hunter,
Emerson Boyd Morrow,
Edward Warren Sturdevant, Jr.

DICKINSON PRIZE

David Marshal Austin.

CLASS OF 1876 MEMORIAL PRIZE FOR DEBATE

George Sandford Hornblower.

THOMAS B. WANAMAKER ENGLISH PRIZE

Winfield Leinbach Hartman.

CLASS OF 1870 JUNIOR ENGLISH PRIZES

Anglo-Saxon—Winfield Leinbach Hartman,
English Literature—William Woods.

MARY CUNNINGHAM HUMPHREYS JUNIOR GERMAN PRIZES

First—William Campbell Kerr,*Second*—Sydney Luard Moore.

ACADEMIC SOPHOMORE HONORMEN

First Group

G. M. Conwell,	High School, Vineland, N. J.
C. Coover,	High School, Harrisburg, Pa.
S. H. Daddow,	High School, Pottsville, Pa.
D. B. Durham,	High School, Reading, Pa.
M. S. Fales,	Masten Park High School, Buffalo, N. Y.
P. C. Mann,	High School, Bloomfield, N. J.
C. C. Mierow,	High School, Lakewood, N. J.
N. M. Thomas,	High School, Marion, O.

Second Group

A. E. Bardwell,	Perikomen Seminary, Pennsburg, Pa.
C. S. Conger,	Illinois College, Jacksonville, Ill.
E. B. Cornwall,	The Gunnery, Washington, Conn.
Dong Seung, •	Dwight School, New York City.
D. B. Doyle,	Shady Side Academy, Pittsburg, Pa.
M. P. Dunlap,	Central High School, St. Paul, Minn.
H. M. Fuller,	Harry Hillman Academy, Wilkes-Barre, Pa.
G. R. Green,	Masten Park High School, Buffalo, N. Y.
A. A. Hamblen,	High School, Flemington, N. J.
W. Irwin,	Lake Forest Academy, Chicago.
I. McNiece,	Collegiate Institute, Salt Lake City, Utah.
C. V. Maddux,	York Collegiate Institute, York, Pa.
J. S. Messler,	State Model School, Trenton, N. J.
H. S. Milton,	High School, Louisville, Ky.
F. S. Moore,	English and Classical School, Newton, N. J.
H. Mount,	Hasbrouck Institute, Jersey City, N. J.
J. A. Newell,	Jacob Tome Institute, Port Deposit, Md.
A. S. Phillips,	High School, St. Louis, Mo.
J. W. Spangler,	Mercersburg Academy, Mercersburg, Pa.
C. D. Thompson,	High School, Montclair, N. J.
R. E. Trone,	York Collegiate Institute, York, Pa.
W. V. Van Doren,	Rev. L. W. Mudge, D.D., Downingtown, Pa.
H. A. Walter,	High School, New Britain, Conn.
C. Ward,	Pomfret School, Pomfret, Conn.
H. C. Zink,	High School, Newark, N. J.

ACADEMIC SOPHOMORE SPECIAL HONORS

GREEK. *High Honors* — D. B. Durham, M. S. Fales, C. C. Mierow, J. W. Spangler, W. V. Van Doren. *Honors* — S. Dong, H. B. Halliday, A. A. Hamblen, C. Horner, W. Irwin, G. Kane, Jr., E. L. McKinlay, P. C. Mann, J. S. Messler, F. S. Moore, M. B. Murfree, W. E. Pearl, H. C. Zink.

LATIN. *High Honors* — S. H. Daddow, D. B. Durham, M. S. Fales, C. C. Mierow, H. Mount, J. W. Spangler, M. V. Van Doren. *Honors* — H. M. Fuller, G. R. Green, A. A. Hamblen, C. V. Maddux, R. E. Trone.

MATHEMATICS. *High Honors* — G. M. Conwell, C. V. Maddux, C. D. Thompson. *Honors* — A. E. Bardwell, J. O. Bigelow, J. S. Burgess, A. T. Carton, D. B. Doyle, M. P. Dunlap, L. M. Dunning, W. H. MacCrellish, F. W. Mullen, Jr., A. S. Phillips, W. McL. Richardson, R. E. Trone, C. E. Wright.

SOPHOMORE HONORMEN, SCHOOL OF SCIENCE

B.S. Course—First Group

J. D. Rue, State Model School, Trenton, N. J.

Second Group

M. H. Eisenhart,	York County Academy, York, Pa.
C. P. Henry,	Blair Presbyterian Academy, Blairstown, N. J.
I. J. S. Loeb,	English High School, Providence, R. I.
R. D. Reimers,	High School, Evanston, Ill.

C.E. Course—Second Group

Charles Baker, Jr.,	Central High School, Columbus, O.
A. H. Doellner, Jr.,	High School, St. Louis, Mo.
E. D. Payne,	Central High School, Duluth, Minn.
W. H. Pollard,	High School, Pottsville, Pa.
T. R. Sharp,	The Hill School, Pottstown, Pa.
T. K. Stevenson,	The Hill School, Pottstown, Pa.

SOPHOMORE PRIZEMEN

CLASS OF 1861 PRIZE

Charles Dederer Thompson, with honorable mention of
George Macfeely Conwell.

FRANCIS BIDDLE SOPHOMORE ESSAY PRIZE

Howard Arnold Walter.

BACHELOR OF SCIENCE SOPHOMORE LATIN SCHOLARSHIP

Raymond Denkmann Reimers.

BACHELOR OF SCIENCE SPECIAL PRIZE IN GERMAN

Walter Lipphardt Schmitz.

ACADEMIC FRESHMAN HONORMEN

First Group

W. W. Hay,	The Morris High School, New York City.
R. W. Kellogg,	High School, Pittsburg, Pa.
E. O. Stanley, Jr.,	High School, East Orange, N. J.
E. Sunstein,	Kiskiminetas Springs School, Saltsburg, Pa.

Second Group

J. B. Beaty,	The Princeton Preparatory School.
D. W. Bell,	High School, Bradford, Pa.
S. H. Bird,	The Hill School, Pottstown, Pa.
J. L. Campbell,	Boys' High School, Brooklyn, N. Y.
G. H. Cresse,	State Normal School, Trenton, N. J.
W. S. Davison,	Peddle Institute, Hightstown, N. J.
D. Edwards,	Central High School, St. Paul, Minn.
L. D. Froelick,	Boys' High School, Brooklyn, N. Y.
J. Gilmore,	Central High School, Philadelphia, Pa.
C. W. Greene,	Masten Park High School, Buffalo, N. Y.
S. Hamilton,	Englewood School for Boys, Englewood, N. J.
R. C. Hoag,	Blair Presbyterial Academy, Blairstown, N. J.
J. T. Jackson,	Boys' High School, Atlanta, Ga.
R. H. Jones, Jr.,	Boys' High School, Atlanta, Ga.
E. W. Kellogg,	Phillips Academy, Andover, Mass.
C. O. v. Kienbusch,	The Chapin Collegiate School, New York City.
A. A. McLeod, Jr.,	Wilson and Lyon School, New York City.
F. R. Nason,	Phillips Academy, Andover, Mass.
A. H. Scott,	Chestnut Hill Academy, Philadelphia, Pa.
R. S. Simpson,	Friends' Select School, Washington, D. C.
R. W. Smith,	Morgan Park Academy, Chicago.
G. B. Stewart, Jr.,	Academic High School, Auburn, N. Y.
P. L. Urban,	William Penn Charter School, Philadelphia, Pa.
A. C. Worth, Jr.,	Englewood School for Boys, Englewood, N. J.

FRESHMAN HONORMEN, SCHOOL OF SCIENCE

B.S. COURSE—*Second Group*

M. Eppley,	Carteret Academy, East Orange, N. J.
K. S. Gradman,	The Hill School, Pottstown, Pa.
T. F. N. Gray,	Newark Academy, Newark, N. J.
B. W. Kerr,	Shady Side Academy, Pittsburg, Pa.
G. H. Reppert,	Dr. Holbrook's School, Ossining, N. Y.
A. E. Wilson,	Shady Side Academy, Pittsburg, Pa.

C.E. COURSE—*Second Group*

C. W. G. Balter,	Columbia Grammar School, New York City.
F. R. Howe,	Friends' Select School, Washington, D. C.
S. Johnson, Jr.,	Shortridge High School, Indianapolis, Ind.
J. R. Munn,	East Orange High School.
J. L. Vauclain,	William Penn Charter School, Philadelphia, Pa.

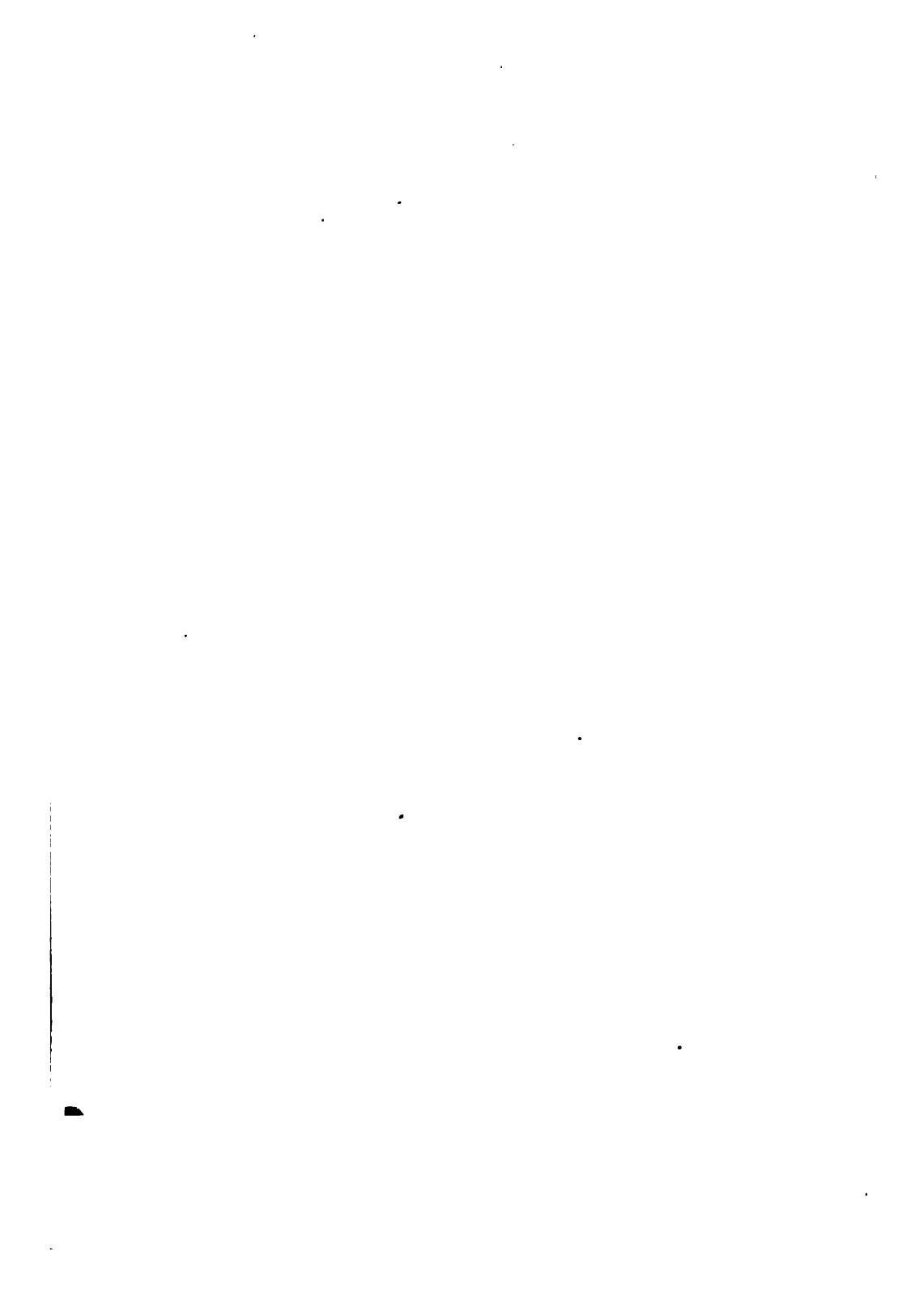
FRESHMAN ENTRANCE PRIZE, JUNE, 1903

Alumni Prize in New York

Edward W. Walker,	The Polytechnic Institute, Brooklyn.
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PART VII

**ALUMNI ASSOCIATIONS
LISTS OF STUDENTS
DIRECTORY AND INDEX**



ALUMNI ASSOCIATIONS

ALUMNI ASSOCIATION OF NASSAU HALL.—Founded 1826.

President, James W. Alexander, A.M., '60.

Secretary, Professor Henry C. Cameron, Ph.D., D.D., '47.

The Alumni Meeting is held in the Gymnasium on Tuesday of Commencement Week at 1.30 P. M., when the Alumni Dinner is served.

WESTERN ASSOCIATION OF PRINCETON CLUBS

President, James C. Ernst, Esq., '73.

Secretary and Treasurer, Joseph W. Lewis, Esq., '90,
421 Olive St., St. Louis.

PRINCETON CLUB OF NEW YORK.—Founded 1866.

72 East 34th St.

President, Tracy H. Harris, '86.

Secretary, William W. Phillips, Esq., '95, 30 Broad St.

PRINCETON ALUMNI ASSOCIATION OF PHILADELPHIA.—Founded 1868.

Merged into the Princeton Club of Philadelphia, January 1, 1903.

PRINCETON CLUB OF PHILADELPHIA.—Chartered 1898.

Honorary President, Hon. Craig Biddle, '41.

President, Alexander Van Rensselaer, Esq., '71.

Secretary, John Irwin Bright, Esq., '90, 1417 Walnut St.

PRINCETON ALUMNI ASSOCIATION OF THE DISTRICT OF COLUMBIA
AND SOUTHERN STATES.—Founded 1872.

President, James M. Johnston, Esq., '70.

Secretary and Treasurer, Wallace Donald McLean, Esq., '96,
416 5th St., N. W., Washington, D. C.

PRINCETON CLUB OF WESTERN PENNSYLVANIA.—Founded 1875.

President, James P. Shaw, M.D., '86.

Secretary, John W. Hussey, Esq., '98, Park Building, Pittsburg.

PRINCETON ALUMNI ASSOCIATION OF CINCINNATI.—Founded 1875.

President, James C. Ernst, '73.*Secretary and Treasurer*, Walton C. Hill, '97, Rawson Building.

PRINCETON CLUB OF CHICAGO.—Founded 1876.

President, Lawrence A. Young, Esq., '92.*Secretary and Treasurer*, James W. Thorne, Esq., '00,
115 Michigan Ave.

PRINCETON CLUB OF ST. LOUIS.—Founded 1876.

President, John D. Davis, Esq., '72.*Secretary*, Joseph W. Lewis, Esq., '90, 421 Olive St.

PRINCETON ALUMNI ASSOCIATION OF OMAHA.—Founded 1884.

President, Leonidas P. Funkhouser, M.D., '78.*Secretary*, Thomas Creigh, Esq., '94, care Cudahy Packing Co., So. Omaha.

PRINCETON ALUMNI ASSOCIATION OF LOUISVILLE.—Founded 1884.

President, John G. Cecil, Esq., '76.*Vice-President*, John W. Barr, Jr., Esq., '85.*Secretary*, A. Scott Bullitt, Esq., '98, 502 Mutual Life of K'y. B'ld'g.CENTRAL PENNSYLVANIA ALUMNI ASSOCIATION OF PRINCETON
UNIVERSITY.—Founded 1885.*President*, Charles H. Bergner, Esq., '74.*Secretary*, W. H. Musser, Esq., '96, 215 N. Second St., Harrisburg.

PRINCETON ALUMNI ASSOCIATION OF MARYLAND.—Founded 1885.

President, George L. Van Bibber, Esq., '65, Bel Air.*Treasurer*, Austin McLanahan, Esq., '92.*Secretary*, William Griffith Wilson, Esq., '94, 822 Park Ave., Baltimore.

PRINCETON CLUB OF TRENTON.—Founded 1886.

President, Hon. Frank S. Katzenbach, Jr., '89.*Secretary*, W. M. Dickinson, Esq., '97.PRINCETON ALUMNI ASSOCIATION OF THE NEW NORTHWEST
Founded 1886.*President*, Hon. Henry F. Green, '80, Duluth, Minn.*Secretary*, Paul C. Weed, '96, 103 National German-American Bank Bld'g,
St. Paul, Minn.

PRINCETON ALUMNI ASSOCIATION OF NORTHEASTERN PENNSYLVANIA
Founded 1886.

President, Thomas H. Atherton, Esq., '74.

Secretary, Edwin Shortz, Jr., Esq., '97, Wilkes-Barre.

PRINCETON ALUMNI ASSOCIATION OF NORTHERN OHIO.—Founded 1887.

President, J. Potter, Esq., '77.

Secretary, O. W. Upson, Esq., '95, 163 River St., Cleveland.

PRINCETON CLUB OF NEWARK.—Founded 1894.

President, John O. H. Pitney, Esq., '81.

Secretary, James B. Burnett, Jr., Esq., '94, 16 Chestnut St.

PRINCETON CLUB OF ALBANY AND VICINITY.—Founded 1889.

President, Rev. Charles A. Richmond, '83.

Secretary, Andrew Thompson, Esq., '99, 53 Lake Ave., Albany.

PRINCETON ALUMNI ASSOCIATION OF DELAWARE.—Founded 1892.

President, Hon. William C. Spruance, '52.

Secretary, W. H. Porter, Esq., '75, Equitable Building, Wilmington.

PRINCETON ALUMNI ASSOCIATION OF CENTRAL NEW YORK
Founded 1894.

President, Professor John Van Dryn, M.D., '62.

Secretary, Joseph D. Green, Esq., '95, 115 East Water St., Syracuse.

PRINCETON ALUMNI ASSOCIATION OF WESTERN NEW YORK
Founded 1894.

President, William B. Lee, '79.

Secretary, George K. Ward, '69, 17 Grove Place, Rochester.

PRINCETON CLUB OF THE SOUTHWEST.—Founded 1895.

President, Edward D. Ellison, '92.

Secretary, John H. Thacher, Esq., '95, Kansas City, Mo.

PRINCETON CLUB OF UNION COUNTY, NEW JERSEY.—Founded 1896.

President, William H. Murray, M.D., '78.

Secretary-Treasurer, Conover English, '99.

ROCKY MOUNTAIN PRINCETON CLUB.—Founded 1894.

President, F. S. Titsworth, Esq., '93.

Secretary-Treasurer, S. H. Thompson, Jr., '97, Ernest and Cranmer Building, Denver.

PRINCETON ALUMNI ASSOCIATION OF NEW ENGLAND.—Founded 1897.

President, Rev. John L. Withrow, D.D., '60.*Secretary*, F. L. Coolidge, Esq., '84, 50 Congress St., Boston, Mass.

PRINCETON ALUMNI ASSOCIATION OF TEXAS.—Founded 1897.

President, Professor George Bruce Halsted, Ph.D., '75.*Secretary-Treasurer*, Charles C. Cresson, Jr., '95, San Antonio, Texas.

PRINCETON ALUMNI ASSOCIATION OF ERIE.—Founded 1897.

President, William Spencer, Esq., '70.*Secretary*, Frank H. Payne, Esq., '91, care Metric Metal Co., Erie.

PRINCETON ALUMNI ASSOCIATION OF INDIANA.—Founded 1898.

President, George T. Porter, Esq., '69.*Secretary*, Theodore Porter, M.D., '82, 308 Newton Claypool Building,
Indianapolis.

PRINCETON ALUMNI ASSOCIATION OF SOUTH AFRICA.—Founded 1898.

President, Rev. F. M. Wood, '58.*Secretary*, George W. Lyon, Esq., '96, Box 433, Port Elizabeth,
Cape Colony.

PRINCETON CLUB OF CEDAR RAPIDS, IOWA.—Founded 1901.

President, Rev. E. R. Burkhalter, '62.*Secretary and Treasurer*, Archer C. Sinclair, '98.

PRINCETON CLUB OF HAWAII.—Founded 1901.

President, John Waterhouse, '96.*Secretary*, Rev. Edward B. Turner, '96, Kohala, H. I.

PRINCETON ALUMNI ASSOCIATION OF SYRIA.—Founded 1902.

President, Rev. William K. Eddy, '75.*Secretary*, Robert S. Steen, '01, Syrian Protestant College, Beirut, Syria.

PRINCETON ALUMNI ASSOCIATION OF GERMANY.—Founded 1902.

Secretary, Herbert Fowler Sill, Esq., '94.*Home Secretary*, Jacob Newton Beam, Esq., '96, Princeton.

PRINCETON ALUMNI ASSOCIATION OF PARIS.—Founded 1903.

Secretary, Evans T. Richardson, Esq., '88, 121 rue Mozart.

STUDENTS OF THE UNIVERSITY

GRADUATE STUDENTS

Allen, Louis Chowning,	Shelbyville, Ky.,	39 B
A.B., Centre College, 1903.		
Anderson, George Ralph,	Wichita, Kan.,	204 H S
A.B., College of Emporia, 1902.		
Anderson, Robert Patton,	Bloomfield, N. J., 21 Madison St.	
A.B., Princeton, 1903.		
Angus, Samuel,	Ballycowan, Ballymena, Ire.,	62 B S
A.B., Royal University of Ireland, 1902; A.M., Royal University of Ireland, 1903.		
Ashley, Morgan,	East Orange, N. J., 45 Van Deventer Av.	
B.S., Princeton, 1903.		
Axtell, Paul Dickson,	Wooster, Ohio,	42 A S
A.B., University of Wooster, 1903.		
Barrett, Charles Wilson,	Richmond, Ky.,	107 H S
A.B., Centre College, 1898.		
Bennett, Walter Leopold,	Port Hope, Ontario, Can.,	44 B S
A.B., University of Queen's College, 1903.		
Bovard, Charles Edward,	Tarentum, Pa.,	308 H S
A.B., Grove City College, 1903.		
Bowlby, Harry Laity,	Asbury, N. J.,	411 H S
A.B., Princeton, 1901; A.M., Princeton, 1903.		
Boyd, James Oscar,	Princeton, N. J.,	50 Univ. Pl.
A.B., New York University, 1895; A.M., New York University, 1897; B.D., New York University, 1899.		
Brooks, William Elizabeth,	Philadelphia, Pa.,	43 A S
B.L., Westminster College, 1900.		

Brown, Hugh, Cliff College, 1898.	Belfast, Ireland,	16 A S
Brown, Spencer Gilson, A.B., Blackburn College, 1903.	Brighton, Ill.,	26 Ed. Pl.
Burslem, George, A.B., French American College, 1900.	Baltimore, Md.,	27 A S
Cady, Schuyler Merritt, A.B., Princeton, 1902.	Summit, N. J.,	5 Nassau St.
Chapin, Dwight Chauncey, A.B., Occidental College, 1902.	Los Angeles, Cal.,	115 H S
Cleland, Thomas Horace, A.B., Occidental College, 1903.	Los Angeles, Cal.,	115 H S
Clemons, William Harry, A.B., Wesleyan University, 1902.	Hartford, Conn.,	22 Madison St.
Close, Gilbert Fairchild, A.B., Princeton, 1903.	Dunmore, Pa.,	21 Madison St.
Corson, Alexander, A.B., Princeton, 1902.	Princeton, N. J.,	34 Wiggins St.
Cox, Leander Jackson, A.B., Roanoke College, 1901.	Wood, Va.,	10 Madison St.
Daniel, Leroy Landis, A.B., Princeton, 1903.	Harrisburg, Pa.,	3 A S
Darrow, Charles Whitney, A.B., Princeton, 1903.	Geneva, N. Y.,	21 Madison St.
Davies, John Morton, A.B., Macalester College, 1903.	Lake Crystal, Minn.,	56 B S
Doak, Alexander Hunt, A.B., King College, 1899.	Russellville, Tenn.,	47 B S
Dobson, Dean Newton, A.B., Washington College, 1901.	Limestone, Tenn.,	201 H S
Edgar, Andrew James, Princeton, 1903.	Jersey City, N. J.,	33 A S
Edgar, Samuel, Geneva College and Reform Presbyterian Theological Seminary.	La Junta, Col.,	105 H S
Fetherolf, William Philip, A.B., Muhlenberg College, 1901.	Kempton, Pa.,	5 N Ed.

Finney, Harry Glenn,	Corsica, Ohio,	310 H S
A.B., University of Wooster, 1902.		
Fisher, Charles Allen,	Lebanon, Pa.,	38 B S
A.B., Lebanon Valley College, 1903.		
Fogel, Philip Howard,	Fogelsville, Pa.,	27 William St.
A.B., Ursinus College, 1901 ; A.M., Princeton, 1902.		
Foote, Greer Alvin,	Caldwell, Ohio,	21 B S
A.B., Wittenberg College, 1901.		
Frank, Adam Garfield,	Mason, Ohio,	209 H S
A.B., Washburn College, 1901 ; A.M., Princeton, 1902.		
Frank, Howard Moody,	Mason, Ohio,	209 H S
A.B., Washburn College, 1899.		
Frederick, Karl Telford,	Oberlin, Ohio,	8 N W
A.B., Princeton, 1903.		
Fulcher, George Sprague,	Toronto, Kan.,	415 H S
A.B., College of Emporia, 1902.		
Grigg, Albert White,	Philadelphia, Pa.,	103 H S
A.B., University of Pennsylvania, 1902.		
Gross, Albert,	Dayton, Ohio,	11 N E
C.E., Princeton, 1903.		
Hammond, Edward Francis,	Walnut, Iowa,	37 A S
A.B., Bellevue College, 1902.		
Handley, Lorin Andrew,	Franklin, Ind.,	111 H S
A.B., Hanover College, 1902.		
Harrison, Bert B.,	Lisbon, Ohio,	65 B S
A.B., University of Wooster, 1903.		
Hatton, Frederic Hammond Howard,	Madison, Wis.,	47 Univ. Pl.
B.S., University of Wisconsin, 1901.		
Hattori, Bunshiro,	Tokio, Japan,	41 S Ed.
A.B., Waseda University, 1902.		
Hodges, Samuel Edgar,	Charlotte, N. C.,	66 B S
A.B., Davidson College, 1902.		
Hollenbach, Walter Franklin,	Durham, Pa.,	
A.B., Princeton, 1903.		
	211 S. Clinton Av.,	Trenton, N. J.
Horn, James Frederick,	Lafayette, Ind.,	300 H S
Beirut College and Wabash College.		

Hutchison, William Merritt, A.B., Park College, 1901.	Alva, Oklahoma Ter.,	410 H S
Isett, William Clement, A.B., Lafayette College, 1901 ; A.M., Princeton, 1903.	Pittsburg, Pa.,	313 H S
Johnson, Leonard Zachariah, Harrisburg, Pa., 109 Witherspoon St. A.B., Lincoln University, 1898 ; A.M., Lincoln University, 1901.		
Johnston, Henry Alan, A.B., Davidson College, 1903.	Norfolk, Va.,	94 B
Kempf, Julius Andrew, A.B., Geneva College, 1900.	New York City,	75 B S
Kepner, William Allison, A.B., Franklin and Marshall, 1898 ; A.M., Franklin and Marshall, 1900.	Gettysburg, Pa.,	7 N Ed.
Kerr, Howard Ickis, A.B., College of Emporia, 1901.	Emporia, Kan.,	415 H S
Knight, Lucian Lamar, A.B., University of Georgia, 1888.	Atlanta, Ga.,	317 H S
Lamberton, Clark Diven, A.B., Dickinson, College, 1902.	Carlisle, Pa.,	63 B S
McCartney, Clarence Edward, A.B., University of Wisconsin, 1901.	Beaver Falls, Pa.,	117 H S
MacDonald, John James, A.B., Princeton, 1903.	Flat River, Canada,	11 S Ed.
Machen, John Gresham, A.B., Johns Hopkins University, 1901.	Baltimore, Md.,	309 H S
MacKay, William Alfred, A.B., Dalhousie College, 1901.	West Branch, N. S.,	210 H S
Mackintosh, Finlay Grant, A.B., Dalhousie College, 1901.	Island East River, N. S.,	206 H S
Marsh, Fred Raymond, A.B., Bowdoin College, 1899.	Dayton, Fla.,	27 B S
Matthews, Leonard Walker, A.B., Presbyterian College of South Carolina, 1902.	Matthews, N. C.,	61 B S
McBride, Hugh Charles, A.B., New Windsor College, 1903.	Wilmington, Del.,	208 H S
McClenaghan, Harry, A.B., University of Nebraska, 1901.	Primrose, Neb.,	207 H S

GRADUATE STUDENTS

339

McCombe, John Warren,	Milwaukee, Wis.,	54 B S
A.B., Durham University, England, 1895.		
McCormick, William Love,	Sewellsville, Ohio,	37 B S
A.B., Franklin College, 1902.		
McCoy, William,	Fairfield, Iowa,	400 H S
B.S., Parsons College, 1902.		
Meacham, John Baxter,	Rock Hill, S. C.,	49 B S
A.B., Davidson College, 1901.		
Messler, Benjamin Edmund,	Trenton, N. J.,	27 S Ed.
A.B., Princeton, 1903.		
Mitchell, Walter Mann,	Philadelphia, Pa.,	27 William St.
B.S., University of Pennsylvania, 1902.		
Morgan, Thomas,	Wilkes-Barre, Pa.,	315 H S
A.B., Lafayette College, 1902.		
Morrill, Guy Louis,	Wollaston, Mass.,	407 H S
Massachusetts Institute of Technology.		
Morris, Robert Hugh,	Barnesville, Ga.,	22 Dickinson St.
University of Georgia and Emory College.		
Mulock, Edwin McCord,	Mount Vernon, Ohio,	41 A S
A.B., Princeton, 1902.		
Nesbitt, John Alison,	Colora, Md.,	409 H S
A.B., Lafayette College, 1902.		
Odell, Edward Albert,	Roslyn, Md.,	215 H S
A.B., Princeton, 1903.		
Olinger, Stanton,	Horton, Kan.,	64 B S
A.B., Kansas State University, 1895.		
Osbourne, Samuel Edmond,	Duffields, W. Va.,	3 Univ. Pl.
A.B., Hampden Sidney College, 1901.		
Peale, John Rogers,	New Bloomfield, Pa.,	409 H S
A.B., Lafayette College, 1902.		
Pires, Emanuel Conceicao,	Jacksonville, Ill.,	5 A S
A.B., Illinois College, 1902.		
Pressly, David Peden,	Troy, Tenn.,	19 B S
A.B., Erskine College, 1901 ; A.M., Erskine College, 1903.		
Preston, Robert Sheffey,	Marion, Va.,	3 U
A.B., Hampden Sidney College, 1903.		

Armstrong, William Campbell,	New York City,	9 L P
Ashley, Douglas Vanneman,	Binghamton, N. Y.,	53 B
Atwater, Edward Sanford, Jr.,	Elizabeth, N. J.,	3 W M W
Austin, David Marshal,	Vineland, N. J.,	9 S M R
Baker, Harold Peters,	White Haven, Pa.,	62 L
Baker, John Whitney,	Plainfield, N. J.,	26 M D
Banigan, Louis	Paterson, N. J.,	23 L
Barr, David Griffin,	Newburgh, N. Y.,	10 N R
Batten, Joseph Zane,	Montclair, N. J.,	98 B
Bispham, George Tucker, Jr.,	Philadelphia, Pa.,	182 L
Bissell, Louis Garner,	Philadelphia, Pa.,	8 N R
Boggs, Norman Towar,	East Orange, N. J.,	G, U
Booth, Samuel Belden,	Danbury, Conn.,	E, E B
Bours, William Alsop, Jr.,	Jacksonville, Fla.,	42 B
Bowers, Wesley Creveling,	Washington, N. J.,	6 S W B
Boyd, Julian Thruston,	Cumberland, Md.,	14 S D
Bradley, Howard Milton,	Bloomfield, N. J.,	11 S D
Brokaw, Roberts,	St. Louis, Mo.,	84 B
Burdick, Charles Kellogg,	New York City,	54 L
Burrell, Edward Lewis,	Chicago, Ill.,	5 E M W
Burtis, Charles Bernacki,	Englewood, N. J.,	2 S W
Butler, Edward Harshberger,	Tacoma, Wash.,	1 W W
Buyers, William Buchanan,	Honey Brook, Pa.,	1 S E B
Carter, Joseph Nelson,	Newark, N. J.,	5 S W B
Carter, Thomas Francis,	Montclair, N. J.,	C, E B
Cecil, John Howe,	Richmond, Va.,	161 L
Chambers, Robert Newton,	Norwich, N. Y.,	14 M D
Christie, John Watson,	Allegheny, Pa.,	14 M D
Churchman, Charles Rumford,	Philadelphia, Pa.,	171 L
Clark, Harry F.,	Port Chester, N. Y.,	11 M D
Clark, William Augustus,	Flushing, N. Y.,	9 N R
Clark, Warren Durant,	St. Louis, Mo.,	15 U P
Cole, Melton Douglas,	East Orange, N. J.,	43 L
Colwell, James Irving,	Warwick, N. Y.,	6 W B
Cook, Joseph Wright,	Pottstown, Pa.,	183 L
Corkran, Lloyd Griffith,	Baltimore, Md.,	19 M D
Corson, Allen,	Princeton, N. J.,	34 Wiggins St.
Crampton, Guy Chester,	Mobile, Ala.,	10 N R

Crary, Roy Palmer,	Cincinnati, O.,	72 L
Crocker, Robert Stewart,	New York City,	4 L P
Daugherty, Ray,	Harrisburg, Pa.,	11 N M R
Day, Daniel Jackson Stewart,	Luzerne, Pa.,	18 S M R
DeWitt, John Riegel,	Riegelsville, Pa.,	181 L
Diefenderfer, Alan Lewis,	Orwigsburg, Pa.,	132 L
Doane, Benjamin Van Duesan,	Elmira, N. Y.,	6 W W
Duff, James Henderson,	Carnegie, Pa.,	23 L
Duffield, George Barry,	Princeton, N. J.,	45 Nassau St.
Edwards, Dwight Woodbridge,	St. Paul, Minn.,	1 S E B
Ewing, William Kennedy,	Uniontown, Pa.,	15 B
Fellows, Edward Percy,	New York City,	3 E M W
Fornance, Joseph Knox,	Norristown, Pa.,	53 B
Fox, Carl Louis,	Wilkinsburg, Pa.,	6 W B
Frelinghuysen, Peter Hood	Ballantine, Morristown, N. J.,	7 L P
Garrison, Carlyle,	Merchantville, N. J.,	9 M D
Gibby, Harold James,	West Pittston, Pa.,	3 W W
Goldsmith, George Moffitt,	Peconic, N. Y.,	133 L
Good, Thomas Roseberry,	Denver, Col.,	305 H S
Graham, Evarts Ambrose,	Chicago, Ill.,	5 E M W
Hagar, Frederic Kimball,	Germantown, Pa.,	133 L
Hartman, Winfield Leinbach,	West Leesport, Pa.,	3 E W
Hastings, George Everett,	Beallsville, Pa.,	10 E W
Hazlehurst, Andrew, Jr.,	Evanston, Ill.,	141 L
Heard, John Jay,	Pittsburg, Pa.,	8 W M W
Henry, Howard Houston,	Germantown, Pa.,	184 L
Henry, Percy Harrington,	Scranton, Pa.,	14 S W
Henson, Horace,	Chattanooga, Tenn.,	3 E M W
Hirt, William Elmer,	Erie, Pa.,	8 W M W
Hoff, Robert Bushong,	Reading, Pa.,	143 L
Hornblower, George Sandford,	New York City,	10 U P
Hornblower, Lewis Woodruff,	New York City,	7 U P
Hudson, Hugh Hardin,	Madisonville, Tenn.,	2 S Ed
Hunter, Graham Chambers,	Denver, Col.,	17 S M R
Jackson, Frederick Wiedemeyer,	New York City,	14 L
Jagger, Albert,	Southampton, N. Y.,	14 S W
Janeway, Lucius Porter,	New Brunswick, N. J.,	4 S E B
Justis, John Albert,	Cincinnati, O.,	131 L

Kahler, Hugh McNair,	Buffalo, N. Y.,	3 N R
Katzenbach, Welling Sickel,	Trenton, N. J.,	154 L
Keith, John Slack,	Newtown, Pa.,	9 N D
Kenly, Perry Hoge,	Chicago, Ill.,	121 L
Kennedy, David Dickey,	Pittsburg, Pa.,	7 W W
Kennedy, William Graham,	New Concord, O.,	3 S Ed
Kerr, William Campbell,	Newark, N. J.,	15 S M R
King, Rockwell,	Chicago, Ill.,	35 U P
Krecker, Frederick Hartzler,	East Orange, N. J.,	1 S R
Laidlaw, Robert Remsen,	New York City,	98 B
Lee, John Lorton,	New York City,	64 L
Lewisohn, Samuel Adolph,	New York City,	90 Nassau St.
Lichtenberger, James Buchanan,	Harrisburg, Pa.,	4 S R
Lindholm, Clifford Falstrom,	Passaic, N. J.,	4 S R
Lindsey, Evans Willson,	Richmond, Va.,	5 E B
Lloyd, James Paul,	Philadelphia, Pa.,	15 N W
Long, Samuel Miller Breckinridge,	St. Louis, Mo.,	9 E M W
Lynn, Edgar Allan,	New York City,	2 Nassau St.
McCoy, William Milton,	East Orange, N. J.,	182 L
McKelvy, Francis Graham,	Pittsburg, Pa.,	11 E W
McLaury, Forrest Hadley,	Marksboro, N. J.,	3 S W
MacLeod, Fraser Lochland,	Chicopee Falls, Mass.,	208 H S
Madden, Francis Larkin,	Ossining, N. Y.,	134 L
Magie, James McCosh,	Princeton, N. J.,	60 Library Pl.
Matteson, James Lynn,	Scranton, Pa.,	8 E M W
Miller, Fred Clinton,	Walton, N. Y.,	6 M D
Miller, Paul James Golden,	Masontown, Pa.,	1 S R
Mills, Herbert Lawrence,	New York City,	54 L
Moffett, George Monroe,	New York City,	54 B
Moore, Phillips Alexander,	New Castle, Pa.,	44 L
Moore, Sydney Luard,	St. Louis, Mo.,	10 S R
Morrow, Emerson Boyd,	Harrisburg, Pa.,	10 S W
Myers, David Rupp,	York, Pa.,	2 S W B
Newman, Harry Ellsworth,	Lakewood, N. J.,	96 B
Ottenheimer, Archie Morton,	Peoria, Ill.,	5 E B
Peake, Howard Dever,	Yonkers, N. Y.,	26 M D
Pell, Richard Varick,	New York City,	38 L
Peters, Edward Heath,	Newark, N. J.,	5 S W B

Phillips, George Irwin,	Alexandria, Pa.,	44	L
Pogue, Samuel Franklin,	Cincinnati, O.,	15	U P
Poole, Abram, Jr.,	Chicago, Ill.,	142	L
Pratt, Alexander Dallas Bache,	New York City,	7	L P
Pratt, Arthur Deudney,	Brooklyn, N. Y.,	7	W M W
Price, Benjamin Marsden,	Oakmont, Pa.,	68	L
Puhl, Paul William,	Harrisburg, Pa.,	11	N M R
Randall, Edmund Brown,	Paterson, N. J.,	9	M D
Ream, Robert Clark,	Chicago, Ill.,	111	L
Reed, Clarence Howett,	Philadelphia, Pa.,	11	N W
Reed, Robert Rush,	Du Bois, Pa.,	3	W M W
Reynolds, Oliver Charlock,	East Orange, N. J.,	23	M D
Richardson, Russell,	Chatham, N. Y.,	13	S D
Riggs, Ernest Wilson,	Marsovan, Turkey-in-Asia,	Dodge Hall	
Riley, Armin William,	New York City,	35	L
Rinehart, Robert Ernest,	Indianapolis, Ind.,	1	N M R
Robert, Christopher Dyer,	Brooklyn, N. Y.,	154	L
Rogers, Lawrence Harrison,	Trenton, N. J.,	11	N W
Root, Stanley William,	Princeton, N. J.,	8	Murray Pl.
Russell, Alexander,	Oyster Bay, N. Y.,	79	Alexander St.
Sabine, Samuel Scheffelin,	New York City,	9	W B
Sammis, Theron Herbert,	Huntington, N. Y.,	6	W B
Satterwhite, Benjamin Offutt,	Louisville, Ky.,	161	L
Savage, Henry Holcombe,	Trenton, N. J.,	4	W M W
Scarborough, James Isaac,	Newport, Ark.,	10	W B
Schultz, Walter Scott,	Madison, N. J.,	12	S W B
Scott, Arthur Pearson,	Chicago, Ill.,	14	W W
Shearer, Conway Wing,	New York City,	64	L
Sheldon, Bayard,	Summit, N. J.,	6	S W B
Shoemaker, Joseph Clark,	Bridgeton, N. J.,	12	S W B
Sill, Walter George,	East Orange, N. J.,	41	B
Sinclair, William,	Edinburgh, Scotland,	302	H S
Sloane, Francis Johnston,	New York City,	38	U
Smith, Andrew Augustus,	Brooklyn, N. Y.,	64	L
Smith, Harold Cornelius,	Chicago, Ill.,	111	L
Steinbach, Jacob, Jr.,	Long Branch, N. J.,	163	L
Stevens, Rolland Drew,	Pittston, Pa.,	68	University Pl.
Stevens, Weld Merrick,	Greenwich, Conn.,	72	L

Stewart, George Pomeroy,	Reading, Pa.,	4 W W
Stone, William Robbins,	Philadelphia, Pa., 240 Nassau St.	
Stowell, William Averill,	St. Paul, Minn.,	46 U
Strong, Archibald McIntyre,	Montclair, N. J.,	3 E B
Sturdevant, Edward Warren, Jr.,	Wilkes-Barre, Pa.,	7 E B
Telford, Herbert McGeoch,	New Sheffield, Pa.,	3 S Ed
Thacher, John Boyd, 2d,	Albany, N. Y.,	143 L
Underhill, William Hurlbert,	East Orange, N. J., 41 Prospect Av.	
Untermeyer, Alvin,	New York City,	16 W W
Van Duyn, Wilbur,	Syracuse, N. Y.,	10 S M R
Van Valzah, Robert,	Bloomington, Ind.,	8 E M W
Vondermuhll, George Albert,	New York City,	9 W B
Wagner, Daniel Eugene,	Water Valley, Miss.,	2 S W B
Walsh, Joseph Richards,	New York City,	B, U
Watres, Lawrence Hawley,	Scranton, Pa.,	43 L
Watson, John Walter,	Fairpoint, O.,	31 B S
Wightman, McQueen Salley,	Charleston, S. C.,	1 W B
Williams, Raymond Sanderson,	Baltimore, Md.,	1 S W B
Williams, Royal Archibald,	Chicago, Ill.,	11 S D
Wilsey, Edwin Shuey,	New York City,	41 B
Wilson, David C., Jr.,	Tarkio, Mo.,	73 Stockton St.
Wilson, Thomas Hopkins, Jr.,	Logansport, Ind.,	11 N D
Wind, Leland Alexander,	St. Louis, Mo.,	84 B
Winger, Waldo McKibben,	Springfield, O.,	60 U
Wolff, Otto, Jr.,	Philadelphia, Pa.,	20 E W
Woodbridge, Samuel Bradford,	New Brunswick, N. J.,	13 N M R
Woodruff, George Bartram,	Elizabeth, N. J.,	23 M D
Woods, William,	Philadelphia, Pa.,	15 M D
Wrightson, William George,	Newark, N. J.,	24 L
Zinram, Henry John,	Erie, Pa.,	1 E W

ACADEMIC JUNIOR CLASS

Ackley, Lewis Arthur,	Hackettstown, N. J.,	2 U P
Adams, Charles Henry,	Portland, Me.,	122 L
Auerbach, John Hone,	New York City,	3 L P
Baker, Albert Theodore,	Harrisburg, Pa.,	6 S E B
Bardwell, Alvah Edgar,	Castalia, O.,	7 S M R
Bigelow, John Ogden,	Newark, N. J.,	9 S D
Bodine, Joseph,	Trenton, N. J.,	13 S W
Bond, Jesse Johnson,	Lawrenceburg, Ky.,	31 U
Bradshaw, William M.,	New York City,	13 M D
Brewster, James Riggs,	Montrose, Pa.,	Dodge Hall
Brinkerhoff, Richard Sayre,	Springfield, Ill.,	1 E B
Brooks, Charles Ames,	Plainfield, N. J.,	9 W M W
Brooks, Noah Reynolds,	Tarrytown, N. Y.,	12 S W
Brower, Charles de Hart, Jr.,	New York City,	2 L P
Brown, Charles Francis,	Baltimore, Md.,	8 E B
Brown, Frederick Lane,	Somerville, N. J.,	10 E M W
Burgess, John Stewart,	Trenton, N. J.,	13 E W
Burke, Thomas James,	Chicago, Ill.,	2 S W
Cadwalader, Lambert,	Fort Washington, Pa.,	7 N D
Callan, Gerard,	Yonkers, N. Y.,	A, B
Carter, Pasco Billings,	Pittsburg, Pa.,	11 S W
Carton, Alfred Thomas,	Chicago, Ill.,	2 W M W
Cavanaugh, Thomas Bertram,	New York City,	40 U
Clark, Kenneth Sherman,	Birmingham, Ala.,	12 E B
Clarke, Dumont, Jr.,	Dumont, N. J.,	2 W M W
Conger, Chauncey Stewart, Jr.,	Carmi, Ill.,	6 S E B
Conwell, George Macfeely,	Vineland, N. J.,	9 S M R
Coover, Carson,	Harrisburg, Pa.,	3 S R
Cornwall, Ellsworth Bedinger,	Princeton, N. J.,	9 E W
Coughlin, George Harper,	Norristown, Pa.,	5 W M W
Crawford, Kenneth B.,	Merion Station, Pa.,	14 B
Daddow, Samuel Harries,	St. Clair, Pa.,	73 B
Dawkins, Charles Carroll,	Princeton, N. J.,	14 Van Deventer Av.
De Ridder, John Howard, Jr.,	Saratoga, N. Y.,	61 L
Dodd, Thomas Nelson,	Bloomfield, N. J.,	2 E M W

Dong, Seung,	New York City,	4 S D
Doyle, Donald Bryce,	Pittsburg, Pa.,	43 B
Duncan, Robert Phifer,	Columbus, O.,	7 E W
Dunlap, Maurice Pratt,	Toledo, O.,	13 N D
Dunning, Lehman M.,	Indianapolis, Ind.,	10 W W
Durham, Donald Blythe,	Reading, Pa.,	17 M D
Duvall, Ralph Gilfillan,	Washington, D. C.,	148 Nassau St.
Ely, Alfred, Jr.,	New York City,	3 L P
Fales, Merton S.,	Buffalo, N. Y.,	1 S M R
Ferris, Ezra Floyd, Jr.,	Newark, N. J.,	8 S R
Fosdick, Raymond Blaine,	Buffalo, N. Y.,	16 N Ed
Foulke, Walter Longfellow,	Germantown, Pa.,	15 N D
Fox, Frank Boughton,	Washington, D. C.,	6 E M W
Fuller, Henry Mills,	Wilkes-Barre, Pa.,	95 B
Funk, John Clarence,	Harrisburg, Pa.,	3 W B
Gamble, Cecil Huggins,	Cincinnati, O.,	12 B
Gardner, Albert Sheperd,	Yazoo City, Miss.,	9 E M W
Garrison, Ralph Alden,	Philadelphia, Pa.,	92 Stockton St.
Gill, Philip Lee,	Brooklyn, N. Y.,	12 S E B
Green, Gilbert Randolph,	Buffalo, N. Y.,	27 M D
Griggs, David Craig,	Somerville, N. J.,	10 E M W
Halliday, Herbert Brotherton,	Columbus, O.,	13 B
Hamblen, Albert Arthur,	Flemington, N. J.,	4 N M R
Harris, Henry,	Newark, N. J.,	16 S M R
Hart, Henry Ridgeway,	Cincinnati, O.,	153 L
Hayden, Horace Edwin, Jr.,	Wilkes-Barre, Pa.,	10 S W B
Heisler, William Henry, Jr.,	Pemberton, N. J.,	7 S R
Herr, Odin Arvine,	Harrisburg, Pa.,	B, W B
Hilliard, Edward Hobbs,	Louisville, Ky.,	6 W M W
Hirsch, Walter A.,	New York City,	6 E W
Hoe, Peter Smith, Jr.,	New Brunswick, N. J.,	8 S R
Holden, John,	Newark, N. J.,	51 L
Holland, Moorhead Benezet,	Pittsburg, Pa.,	7 U
Horner, Charles,	Philadelphia, Pa.,	12 Park St.
Hull, Robert Alonzo,	Scranton, Pa.,	4 N R
Hunter, Lum,	Paris, Ill.,	5 N D
Irwin, Watson,	Springfield, Ill.,	4 N R
Janvrin, Edmond Randolph Peaslee,	New York City,	5 M D

Johnson, William Fell, Jr.,	Baltimore, Md.,	7 U
Jones, Harry Seaver,	East Orange, N. J.,	6 W M W
Kampmann, Isaac Simpson,	San Antonio, Tex.,	10 N D
Kane, George, Jr.,	Highlandtown, Md.,	16 Alexander St.
Kauffmann, Rudolph Max,	Washington, D. C.,	12 E W
Kelso, William Gordon, Jr.,	Jersey City, N. J.,	17 W W
Koch, Scott Lorain,	Lyons Station, Pa.,	3 N R
Leake, Robert Highet,	New York City,	3 N D
Leavitt, Horace Hall, Jr.,	Somerville, Mass.,	15 S W
Lewis, Winfred Davis,	Lansford, Pa.,	21 M D
Limerick, Frederick Buck,	Philadelphia, Pa.,	37 N Ed
Littell, William Bernard,	Setauket, N. Y.,	34 B
Little, Edward Harsen,	Morristown, N. J.,	32 L
Lloyd, Henry,	Pittsburg, Pa.,	11 S W
Lyon, Chester Arthur,	East Orange, N. J.,	6 W M W
McAlpin, Kenneth Rose,	Ossining, N. Y.,	35 U
MacCauley, Harvey,	Trenton, N. J.,	6 E W
MacCrellich, William Howard,	Trenton, N. J.,	5 U P
McDonald, John Oliver,	Englishtown, N. J.,	17 M D
McIlvaine, Richard Biddle,	Pittsburg, Pa.,	15 S Ed
McKinlay, Edwin Lawrence,	Portland, Ore.,	83 B
McNiece, Irwin,	Salt Lake City, Utah,	2 N R
Maddux, Charles Vincent,	Glen Rock, Pa.,	2 S M R
Magee, Eugene Harper,	East Orange, N. J.,	9 B
Man, Ellery Anderson,	New York City,	6 B
Mann, Peter Carter,	Bloomfield, N. J.,	2 E M W
Mason, James Gilbert, Jr.,	Metuchen, N. J.,	34 U
Mathews, Charles Henry, Jr.,	Philadelphia, Pa.,	64 B
Mayers, John Mickle,	Kittanning, Pa.,	34 B
Messler, James Stevens,	Trenton, N. J.,	21 L
Mierow, Charles Christopher,	Lakewood, N. J.,	44 Mercer St.
Milliken, Henry Oothout,	Stamford, Conn.,	9 W M W
Milton, Henry Stites,	Louisville, Ky.,	43 B
Minott, Harold,	New York City,	162 L
Monie, Charles Cockburn,	West Pittston, Pa.,	3 W W
Moore, Frank Shepherd,	Perth Amboy, N. J.,	2 N R
Mount, Horace,	Sea Girt, N. J.,	3 S R
Mowry, Theodore Clayton,	Rome, N. Y.,	15 L

Mullen, Frank Weaver, Jr.,	Centre Valley, Pa.,	21	M D
Murfree, Matthias Brickles,	Murfreesboro, Tenn.,	9	N M R
Newell, James Alexander,	Port Deposit, Md.,		V, U
Ogden, Bryan Kneass,	Orange, N. J.,	9	B
Olyphant, Murray,	Englewood, N. J.,	35	U
Osborn, Alexander Perry,	New York City,	162	L
Peabody, George Russell,	New York City,	8	L P
Pearl, William Ellery,	New York City,	148	Nassau St.
Phelan, James,	Washington, D. C.,	6	E M W
Phillips, Alroy Scolley,	St. Louis, Mo.,	5	S R
Poindexter, Urban Hatfield,	Topeka, Kans.,	61	L
Pond, David Stirling,	Plainfield, N. J.,	81	B
Ream, Edward King,	Thompson, Conn.,	90	Nassau St.
Reinhart, Francis Ormond,	Plainfield, N. J.,	15	N D
Richardson, Edgar,	Bernville, Pa.,	13	W W
Richardson, William McLemore,	Murfreesboro, Tenn.,	31	B
Roper, James Gowen,	Philadelphia, Pa.,	10	S D
Rulon-Miller, John, Jr.,	Haverford, Pa.,	6	N D
Rutherford, Alexander Hawksley,	Roland Park, Md.,	10	W M W
Rutter, Joseph Wood,	Irvington-on-Hudson, N. Y.,	14	B
Sanford, Edwards Sewall, Jr.,	South Orange, N. J.,	61	B
Short, Harold Hall,	St. Louis, Mo.,	2	N D
Slaughter, Rochester Beatty,	Chicago, Ill.,	153	L
Spangler, John Walter,	Mercersburg, Pa.,	15	S W
Stafford, Homer I. Newton,	Millville, N. J.,	122	L
Stevens, Washington Lewis,	Hoboken, N. J.,	23	B
Stewart, John Aikman, 3rd,	Short Hills, N. J.,	186	L
Stewart, Vance,	Cleveland, O.,	43	B
Stratton, Henry Mayer,	Trenton, N. J.,	2	E M W
Stutesman, John Hale,	Peru, Ind.,	11	N D
Sutton, C. Kemper,	Indiana, Pa.,	73	Stockton St.
Terry, John Loving,	Louisville, Ky.,	10	E B
Thomas, Norman Mattoon,	Lewisburg, Pa.,	2	N R
Thompson, Charles Dederer,	Montclair, N. J.,	95	B
Trent, Edmund Kiernan,	Pittsburg, Pa.,	10	S D
Trone, Royal Eugene,	Spring Forge, Pa.,	2	S M R
Van der Veer, Norman Reeve,	New York City,	81	B
Van Doren, Willard Voorhees,	Peekskill, N. Y.,	30	S Ed

ACADEMIC SOPHOMORE CLASS

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Wade, Simon Franklin,	Hackettstown, N. J.,	8 N R
Walter, Howard Arnold,	New Britain, Conn.,	63 B
Ward, Clarence,	Thompson, Conn.,	90 Nassau St.
Ward, Edward S.,	Rochester, N. Y.,	23 B
Warren, Frederick Leslie,	Warrenton, Ore.,	2 M D
Wells, George Titus,	Glen Moore, N. J.,	52 B
West, Davenport,	Galveston, Tex.,	12 B
Whelen, Charles S., Jr.,	Philadelphia, Pa.,	11 L P
White, John McCahan,	Baltimore, Md.,	1 A S
Wilsey, James Arthur,	New York City,	41 B
Winnemore, John,	Trenton, N. J.,	A, E B
Wright, Clarence Edgerton,	Washington, D. C.,	6 E M W
Wyckoff, John Robins,	Princeton Junction, N. J.,	21 L
Young, Roger,	Newark, N. J.,	2 N D
Zink, Homer Charles,	Princeton, N. J.,	60 Univ. Pl.

ACADEMIC JUNIORS, 164

ACADEMIC SOPHOMORE CLASS

Ackley, Frederic Stacy,	Far Hills, N. J.,	19 E W
Anders, William Heebner, Jr.,	Lansdale, Pa.,	39 S Ed
Anderson, John Bouker,	Madison, N. J.,	71 B
Armstrong, Wynn,	Camden, N. J.,	45 U
Atherton, Thomas Henry, Jr.,	Wilkes-Barre, Pa.,	47 U
Bannwart, Alexander William,	Boston, Mass.,	17 E W
Barnes, Kenneth Bigham,	Council Bluffs, Ia.,	19 S W
Barr, Robert Irving,	Orange, N. J.,	71 B
Bartholomew, Morey Cutler,	Buffalo, N. Y.,	18 M D
Beaty, Julian Bonar,	Georgetown, S. C.,	8 W W
Bell, Donald Weldon,	Bradford, Pa.,	62 B
Bird, Singleton Hinman,	New York City,	15 U
Black, Alfred Lawrence, Jr.,	Fair Haven, Wash.,	8 M D
Bliss, Harry Ferdinand,	Newark, N. J.,	40 Wiggins St.
Bonner, Harry V.,	Orwell, N. Y.,	20 S W
Bradford, Edward Wild,	Duxbury, Mass.,	38 S Ed
Brandon, James Campbell,	Butler, Pa.,	79 U
Brooks, John Nixon,	Trenton, N. J.,	52 L

Brown, Bruce Whiting,	Glendale, O.,	10 S E B
Brown, Horace,	Baltimore, Md.,	8 E B
Burton, Granville Lindsay,	Louisville, Ky.,	18 S W
Butler, Ethan Flagg,	Yonkers, N. Y.,	11 U P
Calverley, Edwin Elliott,	Philadelphia, Pa.,	13 S M R
Campbell, John Laurence,	Brooklyn, N. Y.,	47 Univ. Pl.
Campbell, Robert Erskine, Jr.,	Princeton, N. J.,	22 Dickinson St.
Caskey, Robert Edgar,	Philadelphia, Pa.,	13 S M R
Cecil, Stuart Robinson,	Louisville, Ky.,	161 L
Chamberlain, Benjamin Franklin,	Chester, N. Y.,	148 Nassau St.
Churchman, William Bridgman,	Philadelphia, Pa.,	11 L P
Coale, Sidney Thompson,	Toms River, N. J.,	F, S W B
Cole, Philip Gillett,	Helena, Mont.,	3 B
Connolly, Henry John,	Scranton, Pa.,	5 N R
Cossitt, Frederick Henry,	New York City,	31 Nassau St.
Coxe, Marshall,	St. Paul, Minn.,	7 N R
Coyle, Irwin Dunn,	Bridgeton, N. J.,	7 S W
Cresse, George Hoffman,	Swainton, N. J.,	10 N M R
Cunningham, George Smith,	Blairsville, Pa.,	L, U
Cunningham, Warren Wardlaw,	Yazoo City, Miss.,	16 U
Dages, Oren Newton,	Columbus, O.,	162 Nassau St.
Dailey, Carl Northup,	Detroit, Mich.,	A, U
Davis, James Everett,	Scranton, Pa.,	5 N R
Davis, Raymond Foster,	Bloomfield, N. J.,	9 S R
Davison, Walter Seaman,	Hightstown, N. J.,	10 E W
De Turck, James,	Esterly, Pa.,	2 N Ed
Dorman, Roderick Aitken,	New York City,	29 U P
Douglas, Lee,	Nashville, Tenn.,	45 U
Douglas, Richard, Jr.,	Nashville, Tenn.,	3 B
Durham, Fred Stranahan,	Philadelphia, Pa.,	9 S E B
Durham, Joseph Edward, Jr.,	Philadelphia, Pa.,	9 S E B
Edwards, Deane,	St. Paul, Minn.,	7 N R
Ely, John Montague,	Cedar Rapids, Ia.,	R, U
Fairing, Robert Paterson,	Springfield, Mass.,	Mercer Manor
Fish, Henry Denison,	Hempstead, N. Y.,	D, W B
Fleming, Samuel Wilson, Jr.,	Harrisburg, Pa.,	47 U
Fowler, Archibald Kennedy, Jr.,	Caledonia, N. Y.,	E, E B
Franklin, William Henry,	Hightstown, N. J.,	9 E B

Froelick, Louis Daniel,	Brooklyn, N. Y.,	31 L
Furman, Benjamin Applegate,	Newark, N. J.,	20 N W
Galt, Robert Barnes,	St. Louis, Mo.,	22 L
Gerhard, Edward Ashley,	East Orange, N. J.,	12 U
German, Gale Taylor,	Brooklyn, N. Y.,	9 S W
Gilmore, James,	Philadelphia, Pa.,	14 S M R
Glass, Frank Purnell,	Montgomery, Ala.,	50 U
Goas, Harry Jacob,	Schuylkill Haven, Pa.,	14 N M R
Gopsill, James Whiting,	Jersey City, N. J.,	17 S W
Greene, Clayton Wellington,	Buffalo, N. Y.,	11 S M R
Hamilton, Sinclair,	Englewood, N. J.,	L, U
Hamilton, Thomas Parker,	Harrisburg, Pa.,	N, U
Harris, Arthur,	Newark, N. J.,	41 N Ed
Havens, Fred Crane,	Point Pleasant, N. J.,	9 E B
Hay, William Woodhull,	New York City,	5 N W
Hegeman, Runkle Fisher,	Princeton, N. J.,	20 Alexander St.
Hildreth, William Warren,	Southampton, N. Y.,	N, U
Hill, Frederick Stubbins,	Britt, Ia.,	9 W W
Hinds, Roger,	Richmond Hill, N. Y.,	12 W B
Hoag, Raymond Clarence,	Waterford, N. J.,	12 S D
Hoen, Frank Jillard,	Baltimore, Md.,	22 B
Holden, Edward Packard, Jr.,	Madison, N. J.,	71 B
Hovey, Foster Albert,	Hardwick, Vt.,	62 U
Howie, Brison,	Philadelphia, Pa.,	172 Nassau St.
Hoyt, William Studley,	Jamaica, N. Y.,	E, U
Jackson, James Kenny,	Harrisburg, Pa.,	10 S W
Jones, Robert Harrison, Jr.,	Atlanta, Ga.,	E, U
Kahler, Henry Christian,	Buffalo, N. Y.,	3 N R
Kallina, Emanuel John,	Chester, N. Y.,	30 Mercer St.
Kellogg, Robert Wallis	Sewickley, Pa.,	203 H S
Kienbusch, Carl Otto v.,	New York City,	90 Nassau St.
Kirkpatrick, Littleton,	Newark, N. J.,	42 L
Kline, Frederick Luther,	Ridgway, Pa.,	D, U
Leslie, Eugene Hamilton,	Columbus, O.,	7 S W B
Libby, Francis Orville,	Portland, Me.,	C, U
Lightcap, Harrison Barksdale, Jr.,	Yazoo City, Miss.,	8 N M R
Lloyd, William Hendrie,	Philadelphia, Pa.,	15 N W
McClure, Alfred, Jr.,	Wyncote, Pa.,	6 N W

MacCoy, William Logan,	Bryn Mawr, Pa.,	H, U
Macdonald, Gordon, Jr.,	New York City,	1 L P
McEwen, Kenneth Martin,	Amsterdam, N. Y.,	35 B S
McGiffert, Julian Esselstyn,	Roselle, N. J.,	136 Nassau St.
Mackenzie, Charles Arthur,	Portland, Ore.,	83 B
McLeod, Archibald Angus, Jr.,	Princeton, N. J.,	17 Boudinot St.
Macpherson, Donald Fraser,	St. Louis, Mo.,	42 L
Macpherson, John Francis,	Springfield, Ill.,	17 N W
Maurice, Albert Touzalin,	Athens, Pa.,	70 U
Messler, Daniel Ivins,	Deerfield, N. J.,	6 M D
Miller, John,	Leckrone, Pa.,	1 S R
Mixsell, Harold Ruckman,	Easton, Pa.,	9 S W B
Musser, Clayton Arthur,	Harrisburg, Pa.,	66 U
Nash, Francis John,	Manitowoc, Wis.,	70 U
Nason, Fred Russell,	Somerville, Mass.,	17 E W
Neis, Walter Charles,	Madison, N. J.,	7 M D
Nicholls, Charles Chamberlain, Jr.,	St. Louis, Mo.,	2 B
Oberndorf, Paul Ernest,	Centralia, Kan.,	9 S W B
Odell, Walter Tomkins,	Tomkins Cove, N. Y.,	67 U
Offutt, George Warren,	Washington, D. C.,	O, U
Ormond, John Kelso,	Princeton, N. J.,	276 Nassau St.
Oves, Gilbert McCauley,	Harrisburg, Pa.,	12 N M R
Palmer, Edward Albert,	Houston, Tex.,	K, U
Pearl, Dyer, Jr.,	New York City,	9 U
Petrie, James Judd,	Redfield, N. Y.,	16 S W
Phillips, MacNair Atwater,	Scranton, Pa.,	11 S E B
Pierce, Henry Douglas, Jr.,	Indianapolis, Ind.,	75 U
Pierson, Howard Olmstead,	New York City,	164 Nassau St.
Pitts, Richard Steadman,	Warwick, N. Y.,	69 U
Price, Cole Britton,	Scranton, Pa.,	11 S E B
Pyle, James McAlpin,	New York City,	9 L P
Quintard, Charles Louis,	Poughkeepsie, N. Y.,	7 N W
Ralph, Henry William	Jamaica, N. Y.,	9 S R
Rebert, Charles Muthart,	Pottstown, Pa.,	36 N Ed
Reid, Samuel Jackson, Jr.,	Brooklyn, N. Y.,	31 L
Rentschler, Robert Peter,	Hamilton, O.,	7 W B
Richard, Harold Charles,	New York City,	4 B
Richardson, Raymond Beatty,	Cleveland, O.,	136 Nassau St.

Righter, Walter Washington North, Philadelphia, Pa.,	18 Van Deventer Av.
Schaff, Philip Haynes,	Cincinnati, O., 12 W B
Seeley, Paul Stark,	Poughkeepsie, N. Y., 110 Nassau St.
Shipman, Jehiel Gardner,	Belvidere, N. J., 136 Nassau St.
Shoemaker, Isaac Loper,	Bridgeton, N. J., 10 S E B
Simons, Frank Peterson,	Plainfield, N. J., 136 Nassau St.
Simpson, Randolph Stewart,	Washington, D. C., 16 N W
Sinclair, Sidney Meroyne,	Cedar Rapids, Ia., H, U
Smith, Homer Dewhurst,	Pittsburgh, Pa., 97 B
Smith, Sherburn Merrill,	Milwaukee, Wis., P, U
Spohn, George Samuel,	Krumsville, Pa., 32 N Ed
Stanley, Edward Otis, Jr.,	East Orange, N. J., 5 N W
Stewart, George Black, Jr.,	Auburn, N. Y., 9 N W
Stites, John Hunt,	Louisville, Ky., 266 Nassau St.
Stockton, Bayard, Jr.,	Princeton, N. J., Morven
Strater, Charles Helme,	Louisville, Ky., 86 Nassau St.
Sullivan, Paul Barrett,	Philadelphia, Pa., 19 S M R
Sunstein, Elias,	Allegheny, Pa., 46 L
Thomson, McLeod,	Altoona, Pa., 36 L
Tooker, Norman Brown,	East Orange, N. J., 8 W W
Townsend, Barry Eyre,	Lima, O., 266 Nassau St.
Trace, Joseph Montgomery,	Harrisburg, Pa., 1 M D
Ullmann, Frederic, Jr.,	Chicago, Ill., 5 B
Uptegrove, Gifford Mills,	Brooklyn, N. Y., 148 Nassau St.
Urban, Percy Linwood,	Royersford, Pa., 16 S W
Vaughan, Donald Cuyler,	Garden City, N. Y., 5 L P
Vaughan, Robert Grinstead,	Louisville, Ky., 18 Van Deventer Av.
Venable, Edward Carrington, Jr.,	Petersburg, Va., 31 Nassau St.
Voorhees, Clifford Irving,	New Brunswick, N. J., 36 L
Walker, Henry Babcock,	Evansville, Ind., 44 U
Williams, Raymond Storm,	Glen Ridge, N. J., 7 N M R
Woodward, Thomas Mullen,	Philadelphia, Pa., O, U
Worth, Archibald Carter, Jr.,	Cresskill, N. J., 4 N D

ACADEMIC FRESHMAN CLASS

Adams, Albert Lloyd,	Johnstown, Pa.,	39 N Ed
Anders, Monroe Heebner,	Fairview Village, Pa.,	21 N Ed
Barrows, Dudley Hammond,	Plainfield, N. J.,	32 Wiggins St.
Barrows, Walter Loring,	Greenwich, Conn.,	22 Van Deventer Av.
Baskerville, Howard Conklin,	Spearfish, S. Dak.,	18 S. Ed
Beers, Albert Daniel,	Plainfield, N. J.,	32 Wiggins St.
Bell, John Slagle,	Du Bois, Pa.,	168 Nassau St.
Bentley, Herbert,	Newton, N. J.,	34 Van Deventer Av.
Bixby, Edward Welles,	Wilkes-Barre, Pa.,	39 Van Deventer Av.
Bond, Allen McKee,	Lawrenceburg, Ky.,	15 Univ. Pl.
Boynton, Frank Lane,	New York City,	32 Wiggins St.
Brakeley, George Archibald,	Dunellen, N. J.,	45 Van Deventer Av.
Breckinridge, Henry Skillman,	Washington, D. C.,	24 Ed. Pl.
Brown, Ralph Manning,	Elizabeth, N. J.,	15 Univ. Pl.
Brownell, Ralph Chadwick,	Walden, N. Y.,	23 William St.
Bunn, Benjamin Franklin,	Parkesburg, Pa.,	12 S Ed
Campbell, Bernard,	Princeton, N. J.,	22 Dickinson St.
Carber, Frank Hough,	Newton, N. J.,	14 Van Deventer Av.
Carey, John Aloysius,	Brooklyn, N. Y.,	F, U
Catherwood, William Wilson,	Kilrea, Ire.,	16½ Witherspoon St.
Chislett, John Renshaw,	Pittsburg, Pa.,	39 Univ. Pl.
Clark, Cassius Brutus,	Cleveland, O.,	18 Van Deventer Av.
Coan, Hamilton Morel,	Montclair, N. J.,	32 Mercer St.
Conver, Samuel Dresher,	Lansdale, Pa.,	15 N Ed
Cooney, James Lawrence,	Scranton, Pa.,	25 M D
Cummings, Hubertis Maurice,	Harrisburg, Pa.,	10 N Ed
Cunningham, John Howard,	Annapolis, Md.,	42 Wiggins St.
Daggette, William Morton Clair,	Pittsburg, Pa.,	11 Dickinson St.
Davis, Roblin Henry,	Denver, Col.,	15 Univ. Pl.
Deems, Charles Price,	Hornellsville, N. Y.,	92 B
Dempster, Arthur Albion,	Pittsburg, Pa.,	34 Van Deventer Av.
Dillon, Herbert Lowell,	Fitchburg, Mass.,	47 Univ. Pl.
Draper, Robert Allen,	Syracuse, N. Y.,	33 Van Deventer Av.
Duff, George Morgan,	Carnegie, Pa.,	23 L
Dunbar, Hooper Cameron,	Salt Lake City, Utah,	29 Van Deventer Av.

Durell, Thomas Jackson,	Lawrenceville, N. J.,	Lawrenceville, N. J.
Dutcher, Burchard,	Brooklyn, N. Y.,	11 Dickinson St.
Evans, John Wainright,	Miles City, Mon.,	16 B S
Farr, Thomas Henry Powers, Jr.,	West Orange, N. J.,	10 L P
Farrell, Frank Ingersoll,	Newton, N. J.,	31 N Ed
Folz, William Henry,	New York City,	36 S Ed
Fowler, Arthur Boughton,	Springville, N. Y.,	28 N Ed
Fullerton, David Humphrey,	Princeton, N. J.,	8 Chestnut St.
Funk, Erwin Deaterley,	Richland Centre, Pa.,	1 N Ed
Galt, Charles Franklin,	St. Louis, Mo.,	22 L
Garretson, James,	Elmhurst, N. Y.,	33 Ed. Pl.
Gee, Howard James,	Chicago, Ill.,	36 Univ. Pl.
Goas, Horace Zweigiz,	Schuylkill Haven, Pa.,	14 N M R
Goodwin, France Laurence,	Baltimore, Md.,	31 Univ. Pl.
Gordon, James Gay, Jr.,	Philadelphia, Pa.,	31 Univ. Pl.
Graham, Chester Campbell,	Bloomington, Ill.,	40 N Ed
Green, Caleb Smith,	Trenton, N. J.,	19 Univ. Pl.
Hagan, Hugh,	Springfield, O.,	8 Dickinson St.
Haight, Harry William,	Earlville, Ill.,	33 U
Halsted, Douglas,	New York City,	15 Univ. Pl.
Haney, Harvey S.,	Richland Centre, Pa.,	1 S Ed
Hansl, Raleigh Hammond,	New York City,	23 Ed. Pl.
Hardin, William Joshua,	Newton, N. J.,	26 N Ed
Hart, John Francis,	Philadelphia, Pa.,	29 N Ed
Hartzell, Jacob Lott,	York, Pa.,	2 S Ed
Haulenbeek, Raymond Foulston,	Newark, N. J.,	44 Wiggins St.
Haven, William Le Roy, Jr.,	Morristown, N. J.,	23 William St.
Hendrickson, James Allaire,	Mount Holly, N. J.,	33 Ed. Pl.
Henricks, Walter Abraham,	Philadelphia, Pa.,	8 S Ed
Herold, Herman Cleveland Herbert, Jr.,	Newark, N. J.,	60 Univ. Pl.
Herrick, Horace Terhune,	New York City,	14 Van Deventer Av.
Herring, Donald Grant,	Bloomsburg, Pa.,	2 Nassau St.
Hewitt, Joseph Frederick,	New York City,	53 Univ. Pl.
Hobbs, Austin Latting,	Vandalia, Ill.,	42 Wiggins St.
Holt, Cleveland Byron,	Portland, Ore.,	304 H S
Hooks, David Munro,	Holyoke, Mass.,	38 N Ed
Hopkins, George Dare,	Rising Sun, Md.,	18 S M R
Howell, Edmund Orlando, Jr.,	Philadelphia, Pa.,	9 S Ed

Hulsizer, William Richey,	Asbury, N. J.,	32 Mercer St.
Hunting, Gilbert Napier,	Madison, N. J.,	41 Univ. Pl.
Hyde, Wesley Middleton, Jr.,	Franklinville, Md.,	10 S Ed
Jamieson, Edmund Scudder,	Lawrenceville, N. J.,	
	44 Van Deventer Av.	
Jenanyan, Samuel Stephan,	Mersine, Asia Minor,	2 N Ed
Johnson, Harry McClure,	Peoria, Ill.,	29 ¹ / ₂ Van Deventer Av.
Joline, John Forsyth, Jr.,	Philadelphia, Pa.,	36 Wiggins St.
Jones, David Robert,	Wilkes-Barre, Pa.,	42 S Ed
Keepers, William Lloyd,	Newark, N. J.,	37 Wiggins St.
Kerr, William McConkey,	Elizabeth, N. J.,	45 B S
Kilpatrick, George Worth,	Connellsville, Pa.,	168 Nassau St.
Krause, Arthur Krupp,	Lansdale, Pa.,	1 S Ed
Landis, Robert Kumler,	Dayton, O.,	94 B
Langmann, Henry William,	New York City,	19 W W
Larned, Albert Cecil,	Fairfield, Conn.,	19 Univ. Pl.
Lewman, Henry Peters,	Louisville, Ky.,	11 Dickinson St.
Lithgow, Leslie Gordon,	New York City,	40 S Ed
Losey, Leon Artemus,	Nelson, Penn.,	34 Bank St.
Lothrop, George Van Ness,	Detroit, Mich.,	90 Nassau St.
Louderbough, John Janvier,	Salem, N. J.,	14 Van Deventer Av.
Love, George Stroman,	York, Pa.,	24 Chambers St.
Lunn, Arthur Washington,	Newark, N. J.,	60 Univ. Pl.
McClintock, Andrew Todd,	Wilkes-Barre, Pa.,	39 Univ. Pl.
McClintock, Charles Arbuthnot,	Pittsburg, Pa.,	15 Dickinson St.
McIntyre, Newell Wood,	Denver, Col.,	15 Univ. Pl.
Mackie, Alexander,	Philadelphia, Pa.,	19 N Ed
McLean, Donald,	Denver, Col.,	173 Nassau St.
McLean, William Eaton,	Philadelphia, Pa.,	14 S M R
Madden, Joel Davis, Jr.,	Ossining, N. Y.,	134 L
Mapes, Clarence Daniel,	New York City,	36 Univ. Pl.
Martin, James Littell, Jr.,	Belleville, N. J.,	172 L
Martin, Johnson,	Glen Ridge, N. J.,	92 B
Matthews, William,	Scranton, Pa.,	27 Mercer St.
Miles, Alfred Robberts,	Brooklyn, N. Y.,	F, U
Morris, McLean Forman,	New York City,	8 Dickinson St.
Moyer, Winfield Tyson,	Lansdale, Pa.,	15 N Ed
Muller, James Arthur,	Philadelphia, Pa.,	8 N Ed

Murray, Clapham, Jr.,	Baltimore, Md.,	21 Bank St.
Neill, George Gillespie Evans,	Helena, Mont.,	138 Nassau St.
Norton, Philander,	Albion, N. Y.,	20 S Ed
Nutt, John Budd,	Williamsport, Pa.,	90 Nassau St.
Parker, Frederick, Jr.,	Manasquan, N. J.,	7 N R
Parker, Harold Thompson,	Oil City, Pa.,	77 U
Pears, Thomas Clinton, Jr.,	Pittsburg, Pa.,	20 N Ed
Rentschler, Gordon Sohn,	Hamilton, O.,	33 Ed. Pl.
Richards, Arthur Russell,	Brooklyn, N. Y.,	7 N M R
Richardson, Leslie Kirk,	Little Falls, N. Y.,	8 S M R
Riggs, James Forsyth, Jr.,	East Orange, N. J.,	16 Bank St.
Roche, Charles Edward,	East Orange, N. J.,	47 Univ. Pl.
Ruth, John Newcomer,	Connellsville, Pa.,	39 Univ. Pl.
Sargent, George Lloyd,	Philadelphia, Pa.,	9 N Ed
Sayre, John Nevin,	South Bethlehem, Pa.,	39 Van Deventer Av.
Schultz, Chester Kriebel,	Bechtelsville, Pa.,	21 N Ed
Schumaker, Isaac Ripple,	White Haven, Pa.,	16 Chambers St.
Scott, Donald,	Chicago, Ill.,	14 W W
Scott, John Irvine,	Pittsburg, Pa.,	19 Univ. Pl.
Scudder, Charles Damarin,	Portsmouth, O.,	44 Van Deventer Av.
Seitz, Charles Henry,	Philadelphia, Pa.,	30 N Ed
Shaw, Henry Newton,	Colora, Md.,	41 L
Shirley, Rome,	Mamont, Pa.,	17 S Ed
Sidebotham, Robert Simpson,	Lake City, Mich.,	16 Witherspoon St.
Sloan, Alexander Kilgore,	Greensburg, Pa.,	6 N M R
Sloane, George,	New York City,	27 N Ed
Smith, Clyde Fuller,	Islington, Mass.,	12 N Ed
Smith, Courtland Ninde,	Great Barrington, Mass.,	F, W B
Smith, Frederick Newton,	East Worcester, N. Y.,	38 Washington Road
Smith, John Henry,	Newark, N. J.,	172 L
Smith, Lon Champlin,	St. Louis, Mo.,	26 Ed. Pl.
Sohmer, Harry Joseph,	New York City,	19 Univ. Pl.
Spencer, Judah Colt,	Erie, Pa.,	47 Univ. Pl.
Stainback, Ingram Macklin,	Somerville, Tenn.,	9 N M R
Steele, Leverett Spencer,	New York City,	53 Univ. Pl.
Sterritt, Robert John,	Philadelphia, Pa.,	1 S D

Thomas, William Leonard,	New York City,	36 Univ. Pl.
Timmons, William Max,	Kenton, O.,	45 Univ. Pl.
Upton, Francis Robbins,	Orange, N. J.,	36 Univ. Pl.
Van Deusen, Courtland Calvin, Jr.,	Canaan Four Corners, N. Y.,	
	16 Witherspoon St.	
Vandewater, William Collins,	Princeton, N. J.,	
	45 Van Deventer Av.	
Van Sant, Robert Morriss,	Newark, N. J.,	13 N W
Waite, Joseph Raymond,	Warrior's Mark, Pa.,	25 N Ed
Walker, Edward Washburn,	Brooklyn, N. Y.,	39 Van Deventer Av.
Walker, George Alex, Jr.,	Philadelphia, Pa.,	18 N Ed
Walsh, Arthur Bernard,	Brooklyn, N. Y.,	B, U
Ward, Waldron Merry,	Newark, N. J.,	60 Univ. Pl.
Waterhouse, Paul Bernard,	Pasadena, Cal.,	17 N Ed
Waterworth, William, 2d,	Brooklyn, N. Y.,	18 U P
Whitelaw, Hamilton Dey,	St. Louis, Mo.,	41 Univ. Pl.
Wiener, Isidore Kalisch,	Newark, N. J.,	W, U
Willett, Seymour Barrett,	Elizabeth, N. J.,	16 B
Williams, Lewis Jeffery,	Bel Air, Md.,	45 Univ. Pl.
Wilson, William Walter,	Milton, Pa.,	2 Nassau St.
Wood, John Robinson,	Stanley, N. Y.,	33 S Ed
Wooden, Charles Carroll,	Hampstead, Md.,	24 Chambers St.
Worth, Hunting Case,	Bridgehampton, N. Y.,	N, U
Wuerth, Gustav Christopher,	Montclair, N. J.,	8 S M R
Wyckoff, Earle Edgerton,	Stroudsburg, Pa.,	276 Nassau St.

ACADEMIC FRESHMEN, 169

ACADEMIC SPECIALS

Abbott, William Henry,	Ivanhoe, Ill.,	96 B
Alden, John Percy Coleman,	Cornwall, Pa.,	48 Mercer St.
Banghart, Irving,	Hinsdale, Ill.,	19 S W
Bishop, Olin Sprague,	Adams, N. Y.,	17 B
Blakeman, Frederick Thomlinson,	New York City,	15 E W
Brownlee, Frederick Smith,	Port Gibson, Miss.,	72 U
Burkhart, John Paul,	Bernville, Pa.,	5 N Ed
Burt, Maxwell Struthers,	Philadelphia, Pa.,	142 L
Eells, John Dwight,	Walton, N. Y.,	18 M D
Euwer, Eugene Courtney,	Bellevue, Pa.,	9 E W
French, Frederick Fillmore,	New York City,	36 Univ. Pl.
Greski, Thaddeus,	Philadelphia, Pa.,	22 N Ed
Hart, Percy Grier,	Newark, N. J.,	9 B
Holzhauser, Charles William,	Newark, N. J.,	24 L
Hustead, James Edgar,	Uniontown, Pa.,	15 B
Hyde, James Lewers,	Franklinville, Md.,	10 S Ed
Kershaw, William Ernest,	Germantown, Pa.,	93 B
Lyman, Charles Gleason,	East Pembroke, N. Y.,	24 Chambers St.
Lyons, George Paul,	Haywards, Cal.,	62 U
Mackimmie, Alexander Anderson,	Pictou, Nova Scotia,	19 S Ed
McKinnon, Malcolm,	Detroit, Mich.,	25 N Ed
McPherson, Oscar Harmon,	Lawrenceville, N. J.,	17 B
Marple, Wallace Sutton,	Philadelphia, Pa.,	12 A S
Marquis, Chester DuBois,	Bloomington, Ill.,	11 S M R
Mathews, Thomas Rose,	Cleveland, O.,	13 N Ed
Motter, William Colhoun,	St. Joseph, Mo.,	14 E W
Murray, Leslie Ford,	Paterson, N. J.,	6 S W
Nelson, Stanley Foushee,	Winchester, Ky.,	5 S D
Rollins, Frank Bingham,	Columbia, Mo.,	2 B
Rowan, Thomas,	Drumadonald, Ireland,	40 B S
Schwob, Henri,	New York City,	148 Nassau St.
Stoutenburgh, Robert Bartholomew,	Newark, N. J.,	172 Nassau St.
Williams, Eliot Churchill,	Evanston, Ill.,	44 Wiggins St.
Williams, Robert Emmerton,	Chicago, Ill.,	11 S D

STUDENTS IN THE JOHN C. GREEN SCHOOL OF SCIENCE

SCHOOL OF ELECTRICAL ENGINEERING

SECOND YEAR

Boyd, Albert Barnes,	Lansdowne, Pa.,	4 S W
A.B., Princeton, 1902.		
Maltman, John Scott,	Chicago, Ill.,	5 Prospect Av.
B.S., Princeton, 1902.		
Morrell, James Gasherie De Witt,	Hartford, Conn.,	88 Library Pl.
Ph.B., Yale, 1900.		
Shepard, Frederick Newton,	South Orange, N. J.,	10 Nassau St.
A.B., Princeton, 1902.		

FIRST YEAR

Holt, Sidney Tarzowell,	Newark, N. J.,	5 E W
B.S., Princeton, 1903.		
McDermott, Frank Pierce, Jr.,	Freehold, N. J.,	15 N M R
A.B., Princeton, 1902 ; A.M., Princeton, 1903.		
Palmer, Edgar,	New York City,	10 Nassau St.
B.S., Princeton, 1903.		

STUDENTS IN THE ELECTRICAL SCHOOL, . . 7

SCHOOL OF SCIENCE SENIOR CLASS

B. S. COURSE

Adsit, Lynn Magruder,	Hornellsville, N. Y.,	51 B
Allen, John Sinnickson,	South Orange, N. J.,	4 L P
Archer, Peirce, Jr.,	Wynnewood, Pa.,	71 L
Beaty, William Corwin,	Manzanola, Colo.,	185 L
Bell, George Harrington,	Waterford, N. Y.,	7 W M W
Beymer, Arthur Franklin,	Corning, Ia.,	1 E W

Bowyer, Joseph McCarter,	Washington, D. C.,	24	L
Bradley, Harold Hall,	Montclair, N. J.,	98	B
Buchanan, James Marion,	Trenton, N. J.,	19	M D
Chapman, Joseph,	Philadelphia, Pa.,	71	L
Cline, Francis Campbell,	Indianapolis, Ind.,	33	L
Conklin, Ludolph Henry,	Newark, N. J.,	38	U
Cosgrave, Wallace Butler,	Pittsburg, Pa.,	6	S R
Davis, Byron Laffin,	Saugerties, N. Y.,	63	U
Davis, Ralph Tipton,	Blossburg, Pa.,	6	S R
Decker, Sydney Sylvester, Jr.,	Montour Falls, N. Y.,	152	L
De Mange, Ralph Charles,	Bloomington, Ill.,	141	L
Denison, John Morgan, Jr.,	Baltimore, Md.,	121	L
Dennis, Harold,	Newark, N. J.,	39	U
Devereux, Walter Bouchier, Jr.,	Glenwood Springs, Colo.,	2	S E B
Devereux, William Gregory,	Glenwood Springs, Colo.,	2	S E B
Dinsmore, Francis William,	Germantown, Pa.,	171	L
Fleming, Owen Howard,	Plainfield, N. J.,	66	L
Forstall, James Jackson,	Chicago, Ill.,	4	N W
Frankel, Henry,	Des Moines, Ia.,	54	B
Hague, William Edward,	Pittsburg, Pa.,	185	L
Hardenbergh, Thomas Eddy, Jr.,	New York City,	38	L
Hill, Miner Clifford,	Trenton, N. J.,	19	M D
Hoopes, Edwin Lowrey,	Hollidaysburg, Pa.,	8	S E B
Horn, Henry Schuyler,	South Orange, N. J.,	39	U
Hughes, Mervin Garfield,	Long Branch, N. J.,	124	L
Jenvey, Arthur Carleton,	Hoboken, N. J.,	23	U P
Kirkpatrick, John Paxton,	Jamesburg, N. J.,	132	L
Lichty, Ben Russell,	Waterloo, Ia.,	6	B
Metcalf, David,	St. Louis, Mo.,	10	S R
Miles, Jason Daniel,	Miles City, Mont.,	96	B
Mosher, Victor Wadleigh,	New Richmond, Wis.,	6	B
Noble, Harrison Butler,	Menasha, Wis.,	10	S R
Pelham, Alphonzo,	New York City,	131	L
Plumb, Louis Jackson,	East Orange, N. J.,	G,	U
Pogue, Henry,	Cincinnati, O.,	2	S D
Preston, Wilbur Fisk,	Brooklyn, N. Y.,	83	Prospect Av.
Purnell, Lyttleton Bowen,	Baltimore, Md.,	83	Prospect Av.
Ranken, David Dean,	St. Louis, Mo.,	24	B

Rea, James Childs,	Pittsburg, Pa.,	183 L
Reed, James Hay, Jr.,	Pittsburg, Pa.,	112 L
Reynolds, Henry Bailey,	Elmira, N. Y.,	141 L
Rowe, Benjamin,	Saugerties, N. Y.,	4 M D
Scott, Thomas McGee,	Paris, Tex.,	3 W M W
Sinclair, Wallace Morton,	South Orange, N. J.,	8 S E B
Stevens, Clyde Garfield,	Chicago, Ill.,	181 L
Stokes, Robert Johnson,	Trenton, N. J.,	8 S W B
Swann, Chesley Innes,	Louisville, Ky.,	5 N M R
Taggart, Alexander Lewthwaite,	Indianapolis, Ind.,	33 L
Truesdale, Joseph Robinson,	Youngstown, O.,	54 L
Turnbull, Edward Jenkins,	Brooklyn, N. Y.,	3 E B
Vanderhoef, Francis Bailey,	New York City, 83 Prospect Av.	
Warner, Harry Augustus,	Baltimore, Md., 16 Alexander St.	
Whipple, Allen Oldfather,	Duluth, Minn.,	4 S M R
Wildrick, George Albert,	Blairstown, N. J.,	3 S W
Williams, Walter Donaldson,	Oxford, Pa.,	41 L

C. E. COURSE

Ahrens, William Benneville,	Reading, Pa.,	13 W W
Bradley, Albert Cottrell,	East Orange, N. J.,	3 S D
Brown, Elliot Cowden,	Burlington, Vt.,	24 B
Brown, Fred Van Anden,	Clarion, Pa.,	123 L
Cormany, William Buck,	Cincinnati, O.,	42 B
Crane, Joseph Spencer,	West Pittston, Pa.,	8 E M W
Dixon, George Dallas, Jr.,	Rosemont, Pa.,	7 S D
Fox, George, Jr.,	Torresdale, Pa.,	5 S W
Julier, Henry Vaillant,	New York City,	38 L
Kays, William Thornton Anderson,	Newton, N. J.,	21 B
Kimball, Walter Denniston,	Philadelphia, Pa.,	38 U
Latham, Charles, Jr.,	Indianapolis, Ind.,	1 N M R
McIlvaine, Francis Shippen,	Trenton, N. J.,	4 W B
McLure, Norman Roosevelt,	Ardmore, Pa.,	3 S M R
Merrick, Holland Montague, Jr.,	Pottstown, Pa.,	1 S W
Miller, Edward Marcy,	Cape May City, N. J.,	3 S D
Ogle, Alfred McCartney, Jr.,	Indianapolis, Ind.,	33 L
Rea, George Black,	Bryn Mawr, Pa.,	7 S D
Roosevelt, Nicholas Guy,	New York City,	184 L

Schoonmaker, Leon Monroe,	Newark, N. J.,	4 M D
Smith, Ford Cushing,	Great Barrington, Mass.,	3 S M R
Smith, Karl Garthwaite,	Newark, N. J.,	111 L
Townsend, Thomas Gerry, Jr.,	Washington, D. C.,	171 L

SCIENTIFIC SENIORS 84

SCHOOL OF SCIENCE JUNIOR CLASS

B. S. COURSE

Ames, Alfredrick Smith,	Montclair, N. J.,	5 U P
Armstrong, Harry Howard,	Oakmont, Pa.,	112 L
Atwood, John Baird,	Allegheny, Pa.,	35 L
Bakewell, Gifford Childs,	Pittsburg, Pa.,	18 U P
Baldwin, Herbert Van Vlierden,	Nyack, N. Y.,	13 E W
Belden, Augustus Cadwell,	New York City,	5 U P
Boswell, Alfred Craig,	Allegheny, Pa.,	9 E B
Brosius, Lewis Gordon,	Brookville, Pa.,	123 L
Brown, Allan Henry, Jr.,	Montclair, N. J.,	81 B
Buzby, Stockton,	Baltimore, Md.,	10 W M W
Chandlee, Evan Goldsmith, Jr.,	Philadelphia, Pa.,	10 N D
Dickinson, Sackett Moore,	Trenton, N. J.,	7 N D
Earle, David Prince,	Elizabeth, N. J.,	3 S E B
Eisenhart, Martin Herbert,	York, Pa.,	3 W B
Fayerweather, Charles Swinburne,	Paterson, N. J.,	7 B
Flagg, Herbert Harbeck,	Brooklyn, N. Y.,	148 Nassau St.
Forman, William Parker,	Poughkeepsie, N. Y.,	3 S W B
Frick, Childs,	Pittsburg, Pa.,	112 L
Gaskins, Perse Lacy,	Starke, Fla.,	14 N W
Granger, Frederic Stearns,	Cincinnati, O.,	31 B
Griffith, Morrison Elmo,	Conroe, Texas,	52 B
Grimes, James Lee,	Pittsburg, Pa.,	3 S E B
Hamilton, Donald Campbell,	Pittsburg, Pa.,	54 B
Harvey, Thomas William, Jr.,	Orange, N. J.,	15 W W
Heath, Norman Abajah,	Brooklyn, N. Y.,	90 Nassau St.
Henry, Charles Parmenas,	Basking Ridge, N. J.,	6 S E B
Hoyt, Randal Edward,	St. Louis, Mo.,	44 B

Hubbard, Leverett Marsden, Jr.,	Wallingford, Conn.,	1	W M W
Keyes, Rollin Webb,	Evanston, Ill.,	8	E W
King, Alfred Faris,	New Brighton, N. Y.,	51	L
Koehler, Edward Julius,	Cincinnati, O.,	12	S E B
La Forge, Frederick Burr,	Bridgeport, Conn.,	12	W W
Larzelere, John Lach,	Norristown, Pa.,	7	E M W
Loeb, Irwin Jacob Schwarz,	Providence, R. I.,	6	N R
Longcope, Thomas Moore, Jr.,	Lansdowne, Pa.,	7	S R
Malcolm, George Hoag,	Summit, N. J.,	8	W B
Matter, John,	Marion, Ind.,	14	E W
Mayer, Paul Hirschl,	Chicago, Ill.,	20	M D
Morrell, Percy Eugene,	Elizabeth, N. J.,	8	S W B
Nevin, Ernest Delano,	Pittsburg, Pa.,	68	L
Nickerson, John, Jr.,	St. Louis, Mo.,	44	B
Otis, Arthur Houghton,	Yonkers, N. Y.,	5	W B
Pardoe, William Dolton,	Princeton, N. J.,	Tusculum	
Preusse, Julius Wood,	Braddock, Pa.,	68	L
Raymond, Henry Jarvis,	Germantown, Pa.,	3	N D
Reimers, Raymond Denkmann,	Fort Worth, Tex.,	6	N R
Rouse, John Gouldsmith,	Baltimore, Md.,	31	B
Rue, John Davison, Jr.,	Dutch Neck, N. J.,	21	L
St. John, Fordyce Barker,	Hackensack, N. J.,	2	U P
Sanderson, Raymond,	Indianola, Fla.,	5	M D
Sayen, William Henry, Jr.,	Wayne, Pa.,	64	B
Schmitz, Walter Lipphardt,	St. Louis, Mo.,	12	W W
Scribner, Charles Edwin,	Boonton, N. J.,	61	L
Shirk, John Hostetter,	Oregon, Pa.,	74	B
Sloan, Russell Robinson,	Brooklyn, N. Y.,	A, B	
Swan, Henry,	Biloxi, Miss.,	53	L
Tittmann, Charles Trowbridge,	Washington, D. C.,	14	N W
Tobey, Earle Deyo,	Poughkeepsie, N. Y.,	13	B
Tuttle, Frank Harrison,	Summit, N. J.,	168	Nassau St.
Tweedy, Lawrence Leslie,	Knickerbocker, Tex.,	53	L
Voorhees, James Dayton,	Camden, N. J.,	144	L
Walcott, Chester Howe,	Evanston, Ill.,	64	B
Walton, Rudolf Lawrence,	East Orange, N. J.,	7	B
Wills, Ernest Chalkley,	Greenwich, Conn.,	12	M D
Wood, Harry Brookfield,	Bradford, Pa.,	8	S W

C. E. COURSE

Baker, Charles,	Columbus, O.,	1 W M W
Barnes, John Sheldon,	Rockford, Ill.,	11 W B
Brown, George Martin, Jr.,	Monmouth Junction, N. J.,	354 Nassau St.
Bunting, Curtis Daniel,	Hamburg, N. Y.,	22 B
Crosby, William Spencer, Jr.,	Chicago, Ill.,	5 W W
Doellner, Albert Harry, Jr.,	St. Louis, Mo.,	5 S R
Downer, Jay,	Denver, Col.,	8 S E B
English, Charles Clement,	Beverly, N. J.,	7 S R
Forbes, Gordon,	Morristown, N. J.,	164 L
Gaines, Albert Belding, Jr.,	Englewood, N. J.,	16 L
Greenwood, Joseph Rudd,	New York City,	2 E B
Haskell, Fred Kibbe,	Bradford, Pa.,	7 E M W
Howard, Robert Coffin,	Millbrook, N. Y.,	164 Nassau St.
Kafer, Joseph Dana,	Lawrenceville, N. J.,	1 B
Kessler, Harry Clayton, Jr.,	New York City,	5 W M W
Moore, Hubert,	Sewickley, Pa.,	12 E B
Payne, Edward Duggan,	Athens, Pa.,	10 W W
Perry, Albert Curtis,	Worcester, Mass.,	7 E M W
Perry, John Moore,	Elmhurst, N. Y.,	16 M D
Pollard, William Harold,	Pottsville, Pa.,	73 B
Ridgway, Charles Dallas, Jr.,	Jersey City, N. J.,	7 B
Sharp, Thurlow Rawson,	Hornellsville, N. Y.,	2 E B
Simpson, Charles Randolph,	Huntingdon, Pa.,	123 L
Spencer, Frank Norton,	Toledo, O.,	11 N D
Stevenson, Thomas Kennedy,	Schenectady, N. Y.,	20 Library Pl.
Stevenson, Walker Woods,	Roselle, N. J.,	34 B
Townsend, Edward Davis,	Washington, D. C.,	2 M D
Upton, Curtis Perry,	Orange, N. J.,	2 U P
Wallower, Edgar Zollinger,	Harrisburg, Pa.,	2 W B
Wilcox, John Hotchkiss,	Miller's Station, Pa.,	34 Van Deventer Av.
Wilson, Ralph Baker,	Palatka, Fla.,	72 B
Wyeth, Nathaniel Jarvis,	Baltimore, Md.,	11 W B

SCHOOL OF SCIENCE SOPHOMORE CLASS

B. S. COURSE

Abbott, Alfred Houghton,	Corning, N. Y.,	22 B
Ambrose, Charles Arthur,	Orange, N. J.,	17 U
Ambrose, Harrison William,	Orange, N. J.,	17 U
Armstrong, William Metcalf,	Oakmont, Pa.,	6 E B
Bard, Ralph Austin,	Wilmington, Del.,	66 Nassau St.
Bartram, Howard Preston,	Newark, N. J.,	10 M D
Bates, Harry Ogden, Jr.,	Morristown, N. J.,	75 U
Bokum, Norris Harkness,	Chicago, Ill.,	66 Nassau St.
Bradley, John Alfred,	Philadelphia, Pa.,	18 Van Deventer Av.
Brooke, Francis Mark,	Haverford, Pa.,	16 M D
Brown, Edmund Leighton,	New York City,	2 E W
Byram, Herbert Fulton,	Pittsburg, Pa.,	4 E M W
Carothers, Samuel,	Pittsburg, Pa.,	73 U
Cline, Elmer Louis,	Indianapolis, Ind.,	88 Nassau St.
Cloud, Chester Marts,	Baltimore, Md.,	266 Nassau St.
Conde, Louis Henri,	Indianapolis, Ind.,	88 Nassau St.
Cross, James Frederick, Jr.,	East Orange, N. J.,	1, U
Crothers, Roman Rathburn,	Colora, Md.,	24 M D
Cutler, Willard Walker, Jr.,	Morristown, N. J.,	9 N R
Darlington, Henry Buckingham,	Indianapolis, Ind.,	A, U
Doane, Robert Edward,	Elmira, N. Y.,	6 W W
Drake, Raymond Wade,	Irvington, N. J.,	12 U
Eisele, John Lincoln,	Newark, N. J.,	11 E B
Eppley, Marion,	West Orange, N. J.,	15 L P
Fleming, Brooks, Jr.,	Fairmont, W. Va.,	266 Nassau St.
Freeman, Henry Wade, Jr.,	South Orange, N. J.,	1, U
Freeman, William Coleman,	Washington, D. C.,	24 U P
Gibson, Brownlee Harper,	Pittsburg, Pa.,	6 E B
Gilchrist, James Paul,	Lebanon, O.,	5 W B
Goodeno, Jack Miller,	Newark, N. J.,	266 Nassau St.
Goodman, Kenneth Sawyer,	Chicago, Ill.,	86 Nassau St.
Goodrich, Latimer,	Keokuk, Ia.,	15 S D
Graham, Geoffrey,	Montclair, N. J.,	73 U
Gray, Albert Edward Newton,	Irvington, N. J.,	10 N W

Gray, Theodore Francis Newton,	Irvington, N. J.,	10 N W
Greenland, Harold Beebe,	Syracuse, N. Y.,	29 U P
Hale, Paul Morrow,	Duluth, Minn.,	7 S E B
Hasbrouck, Bernard,	Nyack, N. Y.,	20 S W
Hatch, Arthur Pierson,	Stamford, Conn.,	74 B
Hayes, Matthew Cowden,	Lewisburg, Pa.,	42 U
Hazard, Willson,	Richmond, Va.,	16 Van Deventer Av.
Higbie, Harrison Sayre,	Newark, N. J.,	12 Univ. Pl.
Hoagland, Amos Nathan,	Oxford, N. J.,	11 E B
Hopkins, George Anthony,	Amsterdam, N. Y.,	24 Ed. Pl.
Inch, Philip Louis,	Newport News, Va.,	164 Nassau St.
Irwin, John Rankin,	Keokuk, Ia.,	15 S D
Keith, Harold Hall,	Chicago, Ill.,	13 Park St.
Kennedy, Frank,	Hagerstown, Md.,	18 N W
Kerr, Benjamin Warfield,	Newark, N. J.,	15 S M R
Laird, Douglas,	Toronto, Canada,	52 L
Letts, Fred Clayton,	Evanston, Ill.,	15 U
McCallum, Duncan,	Memphis, Tenn.,	49 U
McCreary, George Deardorff, Jr.,	Philadelphia, Pa.,	11 W W
McCutcheon, Norman Lockwood,	Greenwich, Conn.,	266 Nassau St.
McKee, George Ross,	New York City,	4 E M W
McNaughton, John,	Kaukauna, Wis.,	T, U
Moore, Harry Lawson,	Clarion, Pa.,	266 Nassau St.
Morris, Lewis Spencer,	New York City,	1 L P
Morton, Sterling,	Chicago, Ill.,	1 U
Munn, Orson Desaix, Jr.,	New York City,	15 L P
Nevin, Clarence Carnaghan,	Rock Creek Ranch, Col.,	266 Nassau St.
Nicholson, George Burton,	Pittsburg, Pa.,	90 Nassau St.
Orr, Arthur, Jr.,	Evanston, Ill.,	52 L
Perry, Oliver Hazard, Jr.,	Elmhurst, N. Y.,	16 M D
Pogue, John Crawford,	Cincinnati, O.,	2 S D
Presbrey, Charles Spalding,	New York City,	19 U
Rafferty, Ewing Lawrence,	Pittsburg, Pa.,	90 Nassau St.
Reed, Howard Beck,	Seabright, N. J.,	38 Wiggins St.
Reppert, George Henry,	Jamestown, N. Y.,	79 U
Robinson, Montgomery Evans,	Carthage, N. Y.,	42 U

Sayre, Howard Condit,	Madison, N. J.,	62 B
Seeton, Bruce William,	El Paso, Tex.,	64 U
Simmons, Halsey Melville,	Baltimore, Md.,	19 U
Spelletich, Kalman,	Davenport, Ia.,	62 B
Swan, Adron Leigh,	Duluth, Minn.,	11 E B
Talbott, Addison F. M.,	Kansas City, Mo.,	64 U
Tarbell, Swift,	New York City,	1 N W
Ulman, Robert Lee,	Baltimore, Md., 34 Van Deventer Av.	
Updegraff, Samuel,	Pittsburg, Pa.,	148 Nassau St.
Vanderbilt, Oliver De Gray, Jr.,	East Orange, N. J.,	12 U
Whitney, Warren Calvin,	Norwalk, O.,	40 Wiggins St.
Wiley, Silas Moore,	Chicago, Ill.,	86 Nassau St.
Wilson, Arthur Edwin,	Pittsburg, Pa.,	97 B
Zeiss, Harold,	Chicago, Ill.,	172 Nassau St.

C. E. COURSE

Baiter, Charles William Grevel,	New York City,	16 E W
Barry, Ralph Andrew,	300 W. State St., Trenton, N. J.	
Berger, Louis Charles,	New York City,	37 S Ed
Brasher, Philip Marston,	Steamboat Springs, Col.,	1 N W
Brown, George Gilbert,	Newark, N. J.,	90 Nassau St.
Brunswick, Walter,	New York City,	P, U
Connell, Philip Graham,	Evanston, Ill.,	66 Nassau St.
Craig, Allen,	Washington, D. C.,	5 S M R
De Vinne, Charles De Witt,	New York City,	18 Van Deventer Av.
Doyle, Louis John,	Philadelphia, Pa.,	88 Nassau St.
Eagan, Daniel Conan, Jr.,	Philadelphia, Pa.,	88 Nassau St.
Edwards, Harold Sydney,	Santa Barbara, Cal.,	66 Nassau St.
Etherington, Sandford Garland,	East Orange, N. J.,	66 Nassau St.
Evans, George Withers,	Pottstown, Pa.,	19 N W
Gehrken, John Henry,	Brooklyn, N. Y.,	4 S W B
Hardy, Elbert Clarence,	Buffalo, N. Y.,	1 E M W
Holbrook, Rossiter,	Ossining, N. Y.,	4 U
Howe, Frank Ray,	Washington, D. C.,	16 N W
Johnson, James,	Elmira, N. Y.,	136 Nassau St.
Johnson, Sylvester, Jr.,	Indianapolis, Ind.,	88 Nassau St.
Leaming, Richard Smith,	Dennisville, N. J.,	4 E B
Liggett, Thomas, Jr.,	Pittsburg, Pa.,	110 Nassau St.

Lyons, Harold Chandos Clave,	New York City,	3 M D
McCarthy, Daniel Francis,	Princeton, N. J.,	169 Nassau St.
McClure, Jay Cooke,	Wyncote, Pa.,	6 N W
McMillan, Francis Conover,	Princeton, N. J.,	40 Bayard Lane
Munn, John Randall,	East Orange, N. J.,	66 Nassau St.
Nuelle, Joseph Henry,	Chicago, Ill.,	25 M D
Shoemaker, Linden Brown,	Little Silver, N. J.,	1 E M W
Smith, Herbert James,	Putnam, Conn.,	4 W M W
Stagg, David Christie,	Leonia, N. J.,	20 N W
Stickney, Henry,	Baltimore, Md.,	20 W W
Stromberg, Carl Martin,	Saranac Lake, N. Y.,	8 E B
Thompson, Herbert Stephen,	Kingston, N. J.,	Kingston, N. J.
Van Zandt, Hubert,	Lawrenceville, N. J.	
Vauclain, Jacques Leonard,	Rosemont, Pa.,	110 Nassau St.
Veit, Russell Charles,	New York City,	18 E W
Waller, John Cadwallader,	Skaneateles, N. Y.,	15 S D
Wisner, Eugene Dufihl,	Summit, N. J.,	11 L P

SCIENTIFIC SOPHOMORES . . . 123

SCHOOL OF SCIENCE FRESHMAN CLASS

B. S. COURSE

Abernethy, Grenville Goodale,	Watertown, N. Y.,	53 Univ. Pl.
Alexander, Hubert Victor,	Louisville, Ky.,	24 Chambers St.
Alling, Frederic Augustus,	Newark, N. J.,	36 Univ. Pl.
Argersinger, John Wells,	Johnstown, N. Y.,	15 Univ. Pl.
Ash, Charles Emerson,	Pittsburg, Pa.,	29 Van Deventer Av.
Atlee, John Cox,	Fort Madison, Ia.,	138 Nassau St.
Atlee, Samuel, 2d,	Fort Madison, Ia.,	138 Nassau St.
Averill, William McFaddin,	Beaumont, Tex.,	138 Nassau St.
Bangs, William Dean,	Cedar Rapids, Ia.,	53 Univ. Pl.
Barnes, Harry Hamilton,	Syracuse, N. Y.,	33 Van Deventer Av.
Barney, Elbert Lee,	Princeton, N. J.,	11 Dickinson St.
Bedinger, John Van Doren,	Anchorage, Ky.,	24 Chambers St.
Belden, James Jerome, 2d,	Syracuse, N. Y.,	2 Nassau St.
Bergner, George,	Harrisburg, Pa.,	90 Nassau St.
Black, Theodore Perry,	Pittsburg, Pa.,	11 Dickinson St.

Boyesen, Ralph Stewart,	Chicago, Ill.,	138 Nassau St.
Brooks, Walter Booth, 3d,	Baltimore, Md.,	33 Ed. Pl.
Brown, James Twichell,	Williamsport, Pa.,	25 Bank St.
Bubb, Nathaniel Burrows, Jr.,	Williamsport, Pa.,	90 Nassau St.
Buswell, Guy James,	Charleston, N. H.,	28 S Ed
Camp, William Hoke,	Louisville, Ky.,	34 Van Deventer Av.
Carson, John Renshaw,	Sewickley, Pa.,	39 Univ. Pl.
Carson, Robb,	Sewickley, Pa.,	39 Univ. Pl.
Carton, Laurence Roberts,	Chicago, Ill.,	15 Univ. Pl.
Case, Dudley Herrick,	Jersey City, N. J.,	37 Wiggins St.
Chamberlain, Fidelio Gillette,	San Antonio, Tex.,	
		44 Van Deventer Av.
Chandlee, Edward Earl,	Bridesburg, Pa.,	15 Univ. Pl.
Chapman, Richard Bayly,	Baltimore, Md.,	21 Bank St.
Chew, Philip Frederick,	South Orange, N. J.,	36 Univ. Pl.
Childs, Arthur Eliot,	Englewood, N. J.,	2 L P
Cochran, Marshall Gilbert,	Pittsburg, Pa.,	39 Univ. Pl.
Condit, Frank Harvey,	West Orange, N. J.,	
		168 Nassau St.
Conklin, Franklin, Jr.,	Newark, N. J.,	36 Univ. Pl.
Cooder, Clement Moffat,	Rahway, N. J.,	25 S Ed
Cooke, Frederick William, Jr.,	Paterson, N. J.,	36 Univ. Pl.
Coon, Alfred Wallace,	New York City,	34 Van Deventer Av.
Corkran, Benjamin Warren,	Baltimore, Md.,	11 Dickinson St.
Coyle, Ray Frederick,	Denver, Colo.,	15 Dickinson St.
Cranmer, George Ernest,	Denver, Colo.,	15 Univ. Pl.
Crary, Delos,	Hancock, N. Y.,	162 Nassau St.
Crawford, Sidney Laurence,	Merion Station, Pa.,	14 B
Culver, Byron Wadsworth,	Eau Claire, Wis.,	11 Dickinson St.
Cunningham, Frederick William,	Point Pleasant, N. J.,	32 Mercer St.
Curtiss, John Somers,	East Orange, N. J.,	36 Univ. Pl.
Davis, David Melvin,	Buffalo, N. Y.,	21 S Ed
Davis, Jefferson Hayes,	Colorado Springs, Colo.,	15 Dickinson St.
Detsch, Andrew Jackson, Jr.,	Philadelphia, Pa.,	31 William St.
Dorsey, Edgar Albert,	Dickeyville, Md.,	15 Dickinson St.
Euwer, Walter Courtney,	Youngstown, O.,	138 Nassau St.
Everts, Edward Ernest,	Princeton, N. J.,	430 Nassau St.
Fairlie, Chester Wilson,	Newark, N. J.,	60 Univ. Pl.

Fischer, Milton Albert,	East Orange, N. J.,	37 Wiggins St.
Franklin, Clifton Jackson,	San Antonio, Tex.,	15 Dickinson St.
Galvin, Thomas Francis, Jr.,	Boston, Mass.,	2 N W
George, Ralph Moore,	Bradford, Pa.,	34 Bank St.
Gilchrist, Joseph Karl,	Lebanon, O.,	138 Nassau St.
Goldsborough, Lilburn Trigg,	Baltimore, Md.,	88 Nassau St.
Green, Bayard Monroe,	Trenton, N. J.,	14 Van Deventer Av.
Green, George Farrar,	Danbury, Conn.,	2 Nassau St.
Haberman, Harry Walter,	Marion, O.,	2 Nassau St.
Halsey, Edward Chauncey,	New York City,	173 Nassau St.
Heath, Samuel Roy,	Trenton, N. J.,	32 Mercer St.
Herron, Joseph Alexander, Jr.,	Monongahela, Pa.,	138 Nassau St.
Hinrichsen, Carl Fred	Newark, N. J.,	23 William St.
Hoge, Thomas Courtenay, Jr.,	New York City,	19 Univ. Pl.
Horn, John Howard,	Stonington, Conn.,	22 Edwards Pl.
Hummer, Wayne,	La Salle, Ill.,	22 Madison St.
Huyler, Coulter Dunham,	New York City,	15 Univ. Pl.
Johnson, Reeves Kemp,	Rosemont, Pa.,	46 Vand. Av.
Jones, Leonard Chester,	New York City,	31 Univ. Pl.
Keeney, George Alonzo, Jr.,	Elizabeth, N. J.,	16 B
Keith, Roy,	Chicago, Ill.,	31 Univ. Pl.
Kidney, Richard Sluyter,	Auburn, N. Y.,	9 N W
Kimberly, Daniel Lucius,	Neenah, Wis.,	11 Park St.
Kohler, Herbert Ross,	Louisville, Ky.,	6 N M R
Larzelere, Charles Townley,	Norristown, Pa.,	15 Univ. Pl.
Levis, Chester Coursen,	London, England,	45 Univ. Pl.
McAlpin, Allen Heyward,	New York City,	47 Univ. Pl.
McAusland, Randolph Hunter,	Jersey City, N. J.,	45 Univ. Pl.
McCrary, Irvin James,	Denver, Colo.,	15 Dickinson St.
Manness, Stanley,	Scranton, Pa.,	27 Mercer St.
Markham, Alfred Woodward,	West Plains, Mo.,	2 Nassau St.
Marsh, Edgar Clark,	Elizabeth, N. J.,	32 Wiggins St.
Marsh, Henry Lawrence,	Manistee, Mich.,	33 Edwards Pl.
Mather, Carl Norman,	Grand Rapids, Mich.,	2 Nassau St.
Matthai, John Clarke,	Baltimore, Md.,	19 U
Maury, Austin Gardette,	Philadelphia, Pa.,	33 Edwards Pl.
Menefee, Arthur Burley,	Louisville, Ky.,	11 Dickinson St.
Miller, Charles Francis,	Germantown, Pa.,	19 Univ. Pl.

Miller, Emery McKeen,	Roselle, N. J.,	16 B
Moon, Earl Joseph,	St. Louis, Mo.,	138 Nassau St.
Morgan, Stewart McKee,	Pittsburg, Pa.,	31 Univ. Pl.
Mulford, Leslie Frank,	Camden, N. J.,	32 Wiggins St.
Neustadt, Robert Gardner,	Los Angeles, Cal.,	138 Nassau St.
Newcomb, Leslie Wardwell,	Mt. Desert Ferry, Me.,	29 S Ed.
O'Brien, Alvar de Comeau,	New York City,	66 Nassau St.
Oliver, Alfred Cookman, Jr.,	Atlantic Highlands, N. J.,	34 U
Otheman, Roswell Chamberlain,	New York City,	44 Van Deventer Av.
Otis, Norton Prentiss, Jr.,	Yonkers, N. Y.,	44 Van Deventer Av.
Owen, Ralph Woodland,	Eau Claire, Wis.,	11 Dickinson St.
Parkin, Harold Clarke,	Philadelphia, Pa.,	14 Van Deventer Av.
Peckham, Paul Tyler,	New York City,	42 Wiggins St.
Penrose, Charles,	Philadelphia, Pa.,	33 Edwards Pl.
Perley, Allen Putnam, Jr.,	Williamsport, Pa.,	90 Nassau St.
Pierson, A. Romeyn, Jr.,	Glen Ridge, N. J.,	90 Nassau St.
Pollock, Roland Dudley,	Philadelphia, Pa.,	36 Wiggins St.
Popple, Frank Worthen,	Parachute, Colo.,	36 Wiggins St.
Porterfield, Arthur Boyd,	Oil City, Pa.,	15 Dickinson St.
Rheinstein, Sidney,	New York City,	14 Chambers St.
Robards, Charles Montague,	Galveston, Tex.,	15 Dickinson St.
Robert, Daniel Rutgers,	Brooklyn, N. Y.,	22 Edwards Pl.
Robinson, William Alexander,	Louisville, Ky.,	11 Dickinson St.
Rodgers, William White,	Springfield, O.,	73 U
Rust, John Franklin,	Cleveland, O.,	2 Nassau St.
Schmuck, Allen John Carl,	Lawrence, N. Y.,	53 Univ. Pl.
Schwarzschild, Monroe Myron,	New York City,	30 U
Sharp, High,	Salt Lake City, Utah,	29 Van Deventer Av.
Sherman, Joseph, Jr.,	Westfield, N. J.,	42 Wiggins St.
Smith, Clarence Carroll,	Vicksburg, Miss.,	138 Nassau St.
Sulzberger, German Stills,	New York City,	34 Van Deventer Av.
Taliaferro, Charles Champ, Jr.,	Nasons, Va.,	39 Univ. Pl.
Tenney, Harral S.,	Asbury Park, N. J.,	15 Univ. Pl.
Thomas, John Gregg,	Baltimore, Md.,	33 Edwards Pl.
Von Weise, Louis Bradford,	Greenville, Ill.,	47 Univ. Pl.
Waggaman, Thomas Eunalls,	Annapolis, Md.,	82 B
Ward, William Spencer,	Newark, N. J.,	60 Univ. Pl.

Warren, Guy Scott,	Louisville, Ky.,	11 Dickinson St.
Washburn, Arthur Prescott,	Hackensack, N. J.,	15 Dickinson St.
Wells, Lloyd Parker,	St. Louis, Mo.,	90 Nassau St.
Wells, Lemuel Stewart,	New York City,	31 Library Pl.
Wood, Irving Emory,	Pittsburg, Pa.,	22 Van Deventer Av.
Young, Benjamin Swan,	Oyster Bay, N. Y.,	31 Univ. Pl.
Zahniser, Afton Jay,	Pittsburg, Pa.,	53 Univ. Pl.

C. E. COURSE.

Alexander, Claude Aitcheson,	Spring Station, Ky.,	11 U P
Appel, Fred Gregory,	Indianapolis, Ind.,	47 Univ. Pl.
Barbee, Richard Sanders,	Indianapolis, Ind.,	47 Univ. Pl.
Bennett, Harry,	Monmouth Junction, N. J.,	23 Madison St.
Bennett, Judson Harvey,	Cape May City, N. J.,	11 Dickinson St.
Bradley, Wilson,	Duluth, Minn.,	7 S E B
Brooks, Winfred Mudge,	East Orange, N. J.,	138 Nassau St.
Bruen, Clarence Edward,	East Orange, N. J.,	37 Wiggins St.
Bryan, Frederic Elroy,	Chicago, Ill.,	144 Nassau St.
Burleigh, Charles Carroll,	Merchantville, N. J.,	2 Nassau St.
Clark, Harry Newton,	So. Fallsburgh, N. Y.,	23 Madison St.
Colbron, Paul Townsend,	New York City,	15 Univ. Pl.
Cook, Richard Bailey,	Pottstown, Pa.,	47 Univ. Pl.
Craig, Robert Goodwin,	Washington, D. C.,	5 S M R
Creighton, Joseph Hasson,	Altoona, Pa.,	11 Bank St.
Cudell, Carl Frederick,	Chicago, Ill.,	1 Van Deventer Pl.
Dain, Nathaniel,	Peekskill, N. Y.,	11 Park St.
Daub, Walter Henry,	Pottstown, Pa.,	47 Univ. Pl.
Davis, Frank Faville,	New York City,	47 Univ. Pl.
Dodd, Andrew Woodbury, Jr.,	Salem, Mass.,	14 Park St.
Doyle, Willis Arthur,	Trenton, N. J.,	36 Univ. Pl.
Draz, Charles Louis,	New York City,	53 Univ. Pl.
Duff, Malcolm Frederick,	Brooklyn, N. Y.,	190 Nassau St.
Dusenbury, Edgar Truesdell,	Portville, N. Y.,	138 Nassau St.
Eginton, John Watson, Jr.,	New York City,	19 Univ. Pl.
Fager, Paul,	Harrisburg, Pa.,	B, W B
Felgenhauer, Frank John,	Brooklyn, N. Y.,	F, U
Freeman, John Edgar,	Chicago, Ill.,	92 B
Geyer, Berkeley Willard,	Washington, D. C.,	11 Park St.

Gibbens, Chalmers Blair,	Parkersburg, W. Va., 11 Bank St.
Gittings, James Charles, Jr.,	Finksburg, Md., 45 Univ. Pl.
Gordon, William Stuart, Jr.,	Lakeside, N. J., 12 Park St.
Hallett, Norman,	New York City, 4 W M W
Hampson, Arthur Chester,	Newark, N. J., 37 William St.
Harris, Frederick Morgan,	Toronto, Canada, 138 Nassau St.
Henry, Alexander, Jr.,	Philadelphia, Pa., 32 Wiggins St.
Hobbie, Theodore,	Newark, N. J., 13 N W
Horton, Chauncey Todd,	New York City, 32 B
Hubbell, Stewart Brooks,	Canandaigua, N. Y., 34 Wiggins St.
Hulsizer, William Hill,	Flemington, N. J., 32 Mercer St.
Jones, William Ansley, Jr.,	Washington, D. C., 25 Bank St.
Kerper, John Frederic, Jr.,	Harrisburg, Pa., 16 Chambers St.
Kouwenhoven, Cornelius B.,	Brooklyn, N. Y., 39 Van Deventer Av.
Leitch, Robert Ingram,	Evanston, Ill., 166 Nassau St.
Look, Hosea Stetson,	Cottage City, Mass., 72 U
McClay, Samuel Kennedy,	Philadelphia, Pa., 32 B
McCormick, Fred Culver,	Williamsport, Pa., 162 Nassau St.
McCracken, Frederic Beekman,	Newark, N. J., 173 Nassau St.
McIlvain, Walter Biddle,	East Downingtown, Pa., 19 Univ. Pl.
McKee, James Dalzell,	Allegheny, Pa., 138 Nassau St.
Mahany, David,	New York City, 16 Van Deventer Av.
Mathews, Edward Gilbert,	Brooklyn, N. Y., 2 U
Nash, Duane Howard, Jr.,	Millington, N. J., 162 Nassau St.
Osborne, Lemuel,	East Orange, N. J., 16 Van Deventer Av.
Parke, Nathan Grier, 2nd,	Scranton, Pa., 31 Univ. Pl.
Phinny, Harry Brougham, Jr.,	New York City, 36 Wiggins St.
Pratt, John Murdoch,	Elmira, N. Y., 24 Edwards Pl.
Randolph, George Mortimer Fitz,	Freehold, N. J., U, U
Rees, Bird Le Grand,	Elmira, N. Y., 24 Edwards Pl.
Rice, Harold Waterhouse,	Hawaiian Islands, 2 Nassau St.
Robinson, Frederick Earl, Jr.,	Colorado Springs, Colo., 66 Nassau St.
Rosenfeld, Edward Arthur,	New York City, 15 Dickinson St.
Rulon-Miller, Sumner,	Haverford, Pa., 19 Univ. Pl.
Schaff, Schuyler Renwick,	Long Island, N. Y., 39 Univ. Pl.
Schoonmaker, William James,	Plainfield, N. J., 33 Edwards Pl.
Schussler, William Fredricks,	New York City, 199 Nassau St.
Scott, Robert Frederick,	Indianapolis, Ind., 47 Univ. Pl.

Smith, William Kimball,	Brookline, Mass.,	14 Park St.
Stephenson, Grant Thomas,	Marinette, Wis.,	138 Nassau St.
Stratton, Benjamin Franklin,	Trenton, N. J.,	20 A S
Struve, Frederick Adolph,	Princeton, N. J.,	138 Nassau St.
Topping, Henry Junkins,	Greenwich, Conn.,	138 Nassau St.
Turner, Richard Blagg,	Chester, Pa.,	90 Nassau St.
Vetterlein, Joseph Roy,	Radnor, Pa.,	2 N W
Wendling, George Robert, Jr.,	Washington, D. C.,	134 Nassau St.
Whipple, Lucius Roy,	Duluth, Minn.,	4 S M R
Whitlock, Louis Ivey,	Elizabeth, N. J.,	32 Wiggins St.
Willock, George Johnston,	Allegheny, Pa.,	138 Nassau St.

SCIENTIFIC FRESHMEN 211

SCHOOL OF SCIENCE SPECIALS

Abbey, Woodbury,	Brooklyn, N. Y.,	9 W W
Adams, Le Baron,	Chicago, Ill.,	66 Nassau St.
Barnes, Hal,	Nanticoke, Pa.,	1 S D
Berry, George Leslie,	Parishville, N. Y.,	112 Nassau St.
Blanchard, Ralph Farwell,	Orange, N. J.,	36 Univ. Pl.
Bradfield, Charles Earl,	Barnesville, O.,	3 S W B
Brooks, Raymond,	Chicago, Ill.,	5 S W
Brown, Archer Hitchcock,	East Orange, N. J.,	211 Nassau St.
Brown, Lowell Huntington,	East Orange, N. J.,	211 Nassau St.
Bushnell, Howard E.,	Hartford, Conn.,	37 Wiggins St.
Cameron, Evan Sinclair,	Baltimore, Md.,	11 Dickinson St.
Chew, Beverly,	South Orange, N. J.,	22 Ed. Pl.
Clarke, Alexander Fielder,	Pittsburg, Pa.,	26 Ed. Pl.
Cook, Joseph Walton,	Allegheny City, Pa.,	19 Univ. Pl.
Dallmeyer, Thomas Donnelly,	Pittsburg, Pa.,	19 Univ. Pl.
Davis, Stephen Roger,	Neenah, Wis.,	172 Nassau St.
Deane, John Hall, Jr.,	New York City,	13 S Ed
Fitch, John Henry, Jr.,	Youngstown, O.,	40 Wiggins St.
Forsythe, Robert Mills,	New York City,	83 Prospect Av.
Francke, Frederick Rudolph, Jr.,	Indianapolis, Ind.,	88 Nassau St.
Gardiner, John Joslin,	Norwalk, O.,	153 L
Gordon, Philip,	West Point, N. Y.,	70 U

Hemingway, Herbert Clinton,	East Orange, N. J.,	19 E W
Hill, Ralph Richard,	Allegheny, Pa.,	12 N W
Holliday, Robert Fleming,	Dover, Del.,	1 N D
Ill, Edgar Alexander,	Newark, N. J.,	110 Nassau St.
Jack, Harry Matthews,	Bradford, Pa.,	164 Nassau St.
James, Louis Norwood,	Evanston, Ill.,	66 Nassau St.
James, Newton,	New York City,	47 Univ. Pl.
Jennings, Morley Wilmot,	Philadelphia, Pa.,	16 Chambers St.
Jones, J. Raymond,	Philadelphia, Pa.,	33 U P
Jones, Lafon,	Louisville, Ky.,	5 N M R
Jones, William Ashby, Jr.,	Ware Neck, Va.,	24 Ed. Pl.
Karow, Edward, Jr.,	Savannah, Ga.,	2 W B
Kellogg, Edward Washburn,	Vineland, N. J.,	9 S R
Kimball, Dorr Edwin,	Evanston, Ill.,	60 U
Kirkman, Ralph,	Brooklyn, N. Y.,	52 Univ. Pl.
Laidlaw, Elliot Carter Rutherford,	New York City,	47 Univ. Pl.
Lawson, James Sanderson, Jr.,	Williamsport, Pa.,	83 Prospect Av.
Luckenbach, John Lewis,	Brooklyn, N. Y.,	18 Van Deventer Av.
McClave, Roscoe Parke,	Cliffside, N. J.,	23 U P
McMillan, Alexander,	Princeton, N. J.,	40 Bayard Lane
Mason, Walter Leonard,	Brooklyn, N. Y.,	72 B
Morrison, Joseph Arthur,	East Orange, N. J.,	12 S M R
Mulry, George Wegman,	Pittsfield, Mass.,	11 Bank St.
Nicholl, John Seymour,	Rochester, N. Y.,	18 S W
Nicholson, Arthur Donaldson,	Oakmont, Pa.,	90 Nassau St.
Oakford, William Proctor Searight,	Peoria, Ill.,	1 E M W
Osborn, Arthur Herbert,	New York City,	53 Univ. Pl.
Owsley, Harry Bryan, Jr.,	Princeton, N. J.,	Mercer Manor
Paull, Alfred Singleton,	Wheeling, W. Va.,	10 N D
Pinkus, Frederick Ball,	New York City,	53 Univ. Pl.
Porch, Charles Douglas,	Belmar, N. J.,	7 S W
Potter, Albert Thomas,	Philadelphia, Pa.,	42 L
Read, Robert James,	Huntington, Pa.,	29 Van Deventer Av.
Rust, John D.,	Buffalo, N. Y.,	14 Park St.
Scott, Alexander Hodge,	Germantown, Pa.,	C, U
Simons, George Steuart, Jr.,	Plainfield, N. J.,	136 Nassau St.
Sousa, John Philip, Jr.,	New York City,	66 L
Spaulding, Frank Douglas,	Burlington, Vt.,	18 W W

Squire, Aldis Bela,	Orange, N. J.,	37 Wiggins St.
Swan, William Waldron,	Middletown, Conn.,	15 Dickinson St.
Taplin, Harry Woolson,	Hanover, N. H.,	148 Nassau St.
Thayer, Lee Carlton, Jr.,	Greenfield, Ind.,	168 Nassau St.
Turner, William Fitzhugh,	Princeton, N. J.,	31 Nassau St.
Van Camp, Cortland, Jr.,	Indianapolis, Ind.,	31 Univ. Pl.
Van Dyke, Alexander Dean,	Princeton, N. J.,	108 Mercer St.
Waggaman, Floyd Pierpont,	Washington, D. C.,	82 B
Wallin, Ivan Emanuel,	Stanton, Ia.,	166 Nassau St.
Waring, Edward James, 2d,	Plainfield, N. J.,	51 B
Watt, William,	Norristown, Pa.,	15 Univ. Pl.
Westcott, William Clyde,	Union City, Pa.,	110 Nassau St.
Wood, Gerald Ball,	Bradford, Pa.,	8 S W
Yarrow, Harry Creci, Jr.,	Philadelphia, Pa.,	83 Prospect Av.

SCIENTIFIC SPECIALS 74

GENERAL SUMMARY

OFFICERS OF INSTRUCTION AND ADMINISTRATION

Trustees,	27
Alumni Trustees,	5
Faculty and Instructors,	109
University Officers and Curators,	18
Fellows,	13

STUDENTS

GRADUATE SCHOOL,	114
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ACADEMIC DEPARTMENT

Senior Class,	189
Junior Class,	164
Sophomore Class,	165
Freshman Class,	169
Special Students,	34
	721

JOHN C. GREEN SCHOOL OF SCIENCE

Electrical School,	7
Senior Class,	84
Junior Class,	97
Sophomore Class,	123
Freshman Class,	211
Special Students,	74
	596

Total for the year 1903-1904,	1431
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SUMMARY OF STUDENTS BY STATES

Pennsylvania,	342	Delaware,	4
New Jersey,	324	Georgia,	4
New York,	266	Montana,	4
Illinois,	67	Oregon,	4
Ohio,	57	South Carolina,	4
Maryland,	48	Maine,	3
Missouri,	26	Utah,	3
Kentucky,	25	Vermont,	3
Indiana,	24	Nebraska,	2
Connecticut,	23	New Hampshire,	2
District of Columbia,	20	North Carolina,	2
Massachusetts,	19	Washington,	2
Colorado,	18	Arkansas,	1
Iowa,	17	Oklahoma,	1
Texas,	14	Rhode Island,	1
Minnesota,	11	South Dakota,	1
Tennessee,	11	Hawaiian Islands,	1
Wisconsin,	11	British Isles	6
Virginia,	10	Canada,	4
Mississippi,	7	Nova Scotia,	3
California,	6	Japan,	2
Kansas,	6	China,	1
Michigan,	6	Turkey-in-Asia,	1
Florida,	5		
West Virginia,	5		
Alabama,	4		

1431

ABBREVIATIONS

A S, Alexander Hall, Seminary.	N R, North Entry, Reunion Hall.
B, Blair Hall.	N W, North Entry, West College.
B S, Brown Hall, Seminary.	S D, South Entry, Albert B. Dod Hall.
E B, East Entry, David Brown Hall.	S E B, South East Entry, David Brown Hall.
E M W, East Middle Entry, Witherspoon Hall.	S Ed, South East Entry, Edwards Hall.
E W, East Entry, Witherspoon Hall.	S M R, South Middle Entry, Reunion Hall.
H S, Hodge Hall, Seminary.	S R, South Entry, Reunion Hall.
L, Stafford Little Hall.	S W, South Entry, West College.
L P, Lower Pyne Building.	S W B, South West Entry, David Brown Hall.
M D, Middle Entry, Albert B. Dod Hall.	U, University Hall.
N, Nassau Hall.	U P, Upper Pyne Building.
N D, North Entry, Albert B. Dod Hall.	W B, West Entry, David Brown Hall.
N Ed, North Entry, Edwards Hall.	W M W, West Middle Entry, Witherspoon Hall.
N M R, North Middle Entry, Reunion Hall.	

DIRECTORY

OF OFFICERS AND STUDENTS IN ALL DEPARTMENTS OF THE UNIVERSITY

The name of every officer is printed in SMALL CAPITALS.

The names of students are followed by the designation of their several classes (g., Graduate Student; Sr., Senior; Jr., Junior; So., Sophomore; Fr., Freshman; Sp., Special Student; 2, second year; 1, first year); the name of each student is followed also by an abbreviation indicating the department to which he belongs, viz., a., Academic Department; s., The John C. Green School of Science; e., The School of Electrical Engineering.

The abbreviations of the residences of officers and students are found on the preceding page.

Abbey, W., <i>Sp. s</i>	9 W W	Ambrose, C. A., <i>So. s</i>	17 U
Abbott, A. H., <i>So. s</i>	22 B	Ambrose, H. W., <i>So. s</i>	17 U
Abbott, W. H., <i>Sp. a</i>	96 B	Ames, A. S., <i>Fr. s</i>	5 U P
Abernethy, G. G., <i>Fr. s</i>	53 Univ Pl.	Anders, M. H., <i>Fr. a</i>	21 N Ed
Ackley, F. S., <i>So. a</i>	19 E W	Anders, W. H., Jr., <i>So. a</i>	39 S Ed
Ackley, L. A., <i>Fr. a</i>	2 U P	Anderson, G. R., <i>g</i>	204 H S
Adaire, A., 3rd., <i>Sr. a</i>	14 S D	Anderson, J. B., <i>So. a</i>	71 B
Adams, A. L., <i>Fr. a</i>	39 N Ed	Anderson, R. P., <i>g</i>	21 Madison St.
Adams, C. H., <i>Fr. a</i>	122 L	Andrews, H. B., <i>Sr. a</i>	66 L
ADAMS, E. P., <i>Instructor</i> ,		Angus, J. C., <i>Sr. a</i>	9 M D
	The Bachelors	Angus, S., <i>g</i>	62 B S
Adams, LeB., <i>Sp. s</i>	66 Nassau St.	Appel, F. G., <i>Fr. s</i>	47 Univ. Pl.
Adler, D., Jr., <i>Sr. a</i>	20 U P	Archer, P., Jr., <i>Sr. s</i>	71 L
Adsit, L. M., <i>Sr. s</i>	51 B	Argersinger, J. W., <i>Fr. s</i>	15 Univ. Pl.
Ahrens, W. B., <i>Sr. s</i>	13 W W	Arms, G. W., Jr., <i>Sr. a</i>	176 Nassau St.
Alden, J. P. C., <i>Sp. a</i>	48 Mercer St.	Armstrong, E. McP., <i>Sr. a</i>	5 S W B
Alderfer, G. C., <i>Sr. a</i>	12 N D	Armstrong, H. H., <i>Fr. s</i>	112 L
Alexander, C. A., <i>Fr. s</i>	11 U P	Armstrong, W., <i>So. a</i>	45 U
ALEXANDER, C. B., <i>Trustee</i> ,		Armstrong, W. C., <i>Sr. a</i>	9 L P
	New York City	Armstrong, W. M., <i>So. s</i>	6 E B
Alexander, H. V., <i>Fr. s</i>	24 Chambers St.	Ash, C. E., <i>Fr. s</i>	
ALEXANDER, J. W., <i>Trustee</i> ,			29 Van Deventer Av.
	New York City	Ashley, D. V., <i>Sr. a</i>	53 B
Allen, J. S., <i>Sr. s</i>	4 L P	Ashley, M., <i>g</i>	45 Van Deventer Av.
Allen, L. C., <i>g</i>	39 B	Atherton, T. H., Jr., <i>So. a</i>	47 U
Alling, F. A., <i>Fr. s</i>	36 Univ. Pl.	Atlee, J. C., <i>Fr. s</i>	138 Nassau St.

- Atlee, S., 2d., *Fr. s* 138 Nassau St.
 Atwater, E. S., Jr., *Sr. a* 3 W M W
 Atwood, J. B., *fr. s* 35 L
 Auerbach, J. H., *fr. a* 3 L P
 Austin, D. M., *Sr. a* 9 S M R
 AUSTIN, H. D., *Instructor*, 11 S W B
 Averill, W. McF., *Fr. s* 138 Nassau St.
 AXSON, S., *Ass't. Professor*, 10 Nassau St.
 Axtell, P. D., *g* 42 A S
 Baiter, C. W. G., *So. s* 16 E W
 Baker, A. T., *fr. a* 6 S E B
 Baker, C., *fr. s* 1 W M W
 Baker, H. P., *Sr. a* 62 L
 Baker, J. W., *Sr. a* 26 M D
 Bakewell, G. C., *fr. s* 18 U P
 Baldwin, H. VanV., *fr. s* 13 E W
 BALDWIN, J. M., *Professor*, 38 Stockton St.
 Banghart, I., *Sp. a* 19 S W
 Bangs, W. D., *Fr. s* 53 Univ. Pl.
 Banigan, L., *Sr. a* 23 L
 Bannwart, A. W., *So. a* 17 E W
 Barbee, R. S., *Fr. s* 47 Univ. Pl.
 Bard, R. A., *So. s* 66 Nassau St.
 Bardwell, A. E., *fr. a* 7 S M R
 Barnes, H., *Sp. s* 1 S D
 Barnes, H. H., *Fr. s* 33 Van Deventer Av.
 Barnes, J. S., *fr. s* 11 W B
 Barnes, K. B., *So. a* 19 S W
 Barney, E. L., *Fr. s* 11 Dickinson St.
 Barr, D. G., *Sr. a* 10 N R
 Barr, R. I., *So. a* 71 B
 Barrett, C. W., *g* 107 H S
 Barrows, D. H., *Fr. a* 32 Wiggins St.
 Barrows, W. L., *Fr. a* 22 Van Deventer Av.
 Barry, R. A., *So. s* Trenton, N. J.
 Bartholomew, M. C., *So. a* 18 M D
 Bartram, H. P., *So. s* 10 M D
 Baskerville, H. C., *Fr. a* 18 S Ed
 Bates, H. O., Jr., *So. s* 75 U
 Batten, J. Z., *Sr. a* 98 B
 BEAM, J. N., *Instructor*, 13 L
 Beaty, J. B., *So. a* 8 W W
 Beaty, W. C., *Sr. s* 185 L
 Bedinger, J. Van D., *Fr. s* 24 Chambers St.
 Beers, A. D., *Fr. a* 32 Wiggins St.
 Belden, A. C., *fr. s* 5 U P
 Belden, J. J., 2d., *Fr. s* 2 Nassau St.
 Bell, D. W., *So. a* 62 B
 Bell, G. H., *Sr. s* 7 W M W
 Bell, J. S., *Fr. a* 168 Nassau St.
 Bennett, H., *Fr. s* 23 Madison St.
 Bennett, J. H., *Fr. s* 11 Dickinson St.
 Bennett, W. L., *g* 44 B S
 Bentley, H., *Fr. a* 34 Van Deventer Av.
 Berger, L. C., *So. s* 37 S Ed
 Bergner, G., *Fr. s* 90 Nassau St.
 Berry, G. L., *Sp. s* 112 Nassau St.
 Beymer, A. F., *Sr. s* 1 E W
 Bigelow, J. O., *fr. a* 9 S D
 Bird, S. H., *So. a* 15 U
 Bishop, O. S., *Sp. a* 17 B
 Bispham, G. T., Jr., *Sr. a* 182 L
 Bissell, L. G., *Sr. a* 8 N R
 Bixby, E. W., *Fr. a* 39 Van Deventer Av.
 Black, A. L., Jr., *So. a* 8 M D
 Black, T. P., *Fr. s* 11 Dickinson St.
 BLAIR, D. C., *Trustee*, Belvidere, N. J.
 Blakeman, F. T., *Sp. a* 15 E W
 Blanchard, R. F., *Sp. s* 36 Univ. Pl.
 BLAU, M. F., *Ass't. Professor*, 27 Bank St.
 Bliss, H. F., *So. a* 40 Wiggins St.
 Bodine, J., *fr. a* 13 S W
 Boggs, N. T., *Sr. a* G, U
 Bokum, N. H., *So. s* 66 Nassau St.
 Bond, A. McK., *Fr. a* 15 Univ. Pl.
 Bond, J. J., *fr. a* 31 U
 Bonner, H. V., *So. a* 20 S W
 Booth, S. B., *Sr. a* E, E B
 Boswell, A. C., *fr. s* 9 E B
 Bours, W. A., Jr., *Sr. a* 42 B
 Bovard, C. E., *g* 308 H S
 Bowers, W. C., *Sr. a* 6 S W B
 Bowlby, H. L., *g* 411 H S
 Bowyer, J. McC., *Sr. s* 24 L
 Boyd, A. B., *2 e* 4 S W
 Boyd, J. O., *g* 50 University Pl.
 Boyd, J. T., *Sr. a* 14 S D
 Boyesen, R. S., *Fr. s* 138 Nassau St.
 Boynton, F. L., *Fr. a* 32 Wiggins St.
 BRACKETT, C. F., *Professor*, 4 Prospect Av.
 Bradfield, C. E., *Sp. s* 3 S W B
 Bradford, E. W., *So. a* 38 S Ed

Bradley, A. C., <i>Sr. s</i>	3 S D	Bunting, C. D., <i>Jr. s</i>	22 B
Bradley, H. H., <i>Sr. s</i>	98 B	Burdick, C. K., <i>Sr. a</i>	54 L
Bradley, H. M., <i>Sr. a</i>	11 S D	Burgess, J. S., <i>Jr. a</i>	13 E W
Bradley, J. A., <i>So. s</i>	18 Van Deventer Av.	Burke, T. J., <i>Jr. a</i>	2 S W
Bradley, W., <i>Fr. s</i>	7 S E B	Burkhart, J. P., <i>Sp. a</i>	5 N Ed
Bradshaw, W. M., <i>Jr. a</i>	13 M D	Burleigh, C. C., <i>Fr. s</i>	2 Nassau St.
Brakeley, G. A., <i>Fr. a</i>	45 Van Deventer Av.	BURNHAM, C. E., <i>Choirmaster,</i>	448 St. Nicholas Av., N. Y. City
Brandon, J. C., <i>So. a</i>	79 U	Burrell, E. L., <i>Sr. a</i>	5 E M W
Brasher, P. M., <i>So. s</i>	1 N W	Burslem, G., <i>g</i>	27 A S
Breckinridge, H. S., <i>Fr. a</i>	24 Ed. Pl.	Burt, M. S., <i>Sp. a</i>	142 L
Brewster, J. R., <i>Jr. a</i>	Dodge Hall	Burtis, C. B., <i>Sr. a</i>	2 S W
Brinkerhoff, R. S., <i>Jr. a</i>	1 E B	Burton, G. L., <i>So. a</i>	18 S W
Brokaw, R., <i>Sr. a</i>	84 B	Bushnell, H. E., <i>Sp. s</i>	37 Wiggins St.
Brooke, F. M., <i>So. s</i>	16 M D	Buswell, G. J., <i>Fr. s</i>	28 S Ed
Brooks, C. A., <i>Jr. a</i>	9 W M W	Butler, E. F., <i>So. a</i>	11 U P
Brooks, J. N., <i>So. a</i>	52 L	Butler, E. H., <i>Sr. a</i>	1 W W
Brooks, N. R., <i>Jr. a</i>	13 S W	BUTLER, H. C., <i>Lecturer,</i>	14 Nassau St.
Brooks, R., <i>Sp. s</i>	5 S W	Buyers, W. B., <i>Sr. a</i>	1 S E B
Brooks, W. B., 3rd., <i>Fr. s</i>	33 Ed. Pl.	Buzby, S., <i>Jr. s</i>	10 W M W
Brooks, W. E., <i>g</i>	43 A S	Byram, H. F., <i>So. s</i>	4 E M W
Brooks, W. M., <i>Fr. s</i>	138 Nassau St.		
Brosius, L. G., <i>Jr. s</i>	123 L	CADWALADER, J. L., <i>Trustee,</i>	New York City
Bruen, C. E., <i>Fr. s</i>	37 Wiggins St.	Cadwalader, L., <i>Jr. a</i>	7 N D
Brunswick, W., <i>So. s</i>	P, U	Cady, S. M., <i>g</i>	5 Nassau St.
Brower, C. deH., <i>Jr. Jr. a</i>	2 L P	Callan, G., <i>Jr. a</i>	A, B
Brown, A. H., <i>Sp. s</i>	211 Nassau St.	Calverley, E. E., <i>So. a</i>	13 S M R
Brown, A. H., Jr., <i>Jr. s</i>	81 B	CAMERON, A. G., <i>Professor,</i>	26 Alexander St.
Brown, B. W., <i>So. a</i>	10 S E B	Cameron, E. S., <i>Sp. s</i>	11 Dickinson St.
Brown, C. F., <i>Jr. a</i>	8 E B	CAMERON, H. C., <i>Professor,</i>	34 Mercer St.
Brown, E. C., <i>Sr. s</i>	24 B	Camp, W. H., <i>Fr. s</i>	34 Van Deventer Av.
Brown, E. L., <i>So. s</i>	2 E W	Campbell, B., <i>Fr. a</i>	22 Dickinson St.
Brown, F. L., <i>Jr. a</i>	10 E M W	Campbell, J. L., <i>So. a</i>	47 Univ. Pl.
Brown, F. VanA., <i>Sr. s</i>	123 L	Campbell, R. E., Jr., <i>So. a</i>	22 Dickinson St.
Brown, G. G., <i>So. s</i>	90 Nassau St.	Carber, F. H., <i>Fr. a</i>	14 Van Deventer Av.
Brown, G. M., Jr., <i>Jr. s</i>	354 Nassau St.	Carey, J. A., <i>Fr. a</i>	F, U
Brown, H., <i>So. a</i>	8 E B	Carothers, S., <i>So. s</i>	73 U
Brown, H., <i>g</i>	16 A S	Carson, J. R., <i>Fr. s</i>	39 Univ. Pl.
Brown, J. T., <i>Fr. s</i>	25 Bank St.	Carson, R., <i>Fr. s</i>	39 Univ. Pl.
Brown, L. H., <i>Sp. s</i>	211 Nassau St.	CARTER, J. B., <i>Professor,</i>	93 Library Pl.
Brown, R. M., <i>Fr. a</i>	15 Univ. Pl.	Carter, J. N., <i>Sr. a</i>	5 S W B
Brown, S. G., <i>g</i>	26 Edwards Pl.	Carter, P. B., <i>Jr. a</i>	11 S W
Brownell, R. C., <i>Fr. a</i>	23 Williams St.	Carter, T. F., <i>Sr. a</i>	C, E B
Brownlee, F. S., <i>Sp. a</i>	72 U	Carton, A. T., <i>Jr. a</i>	2 W M W
Bryan, F. E., <i>Fr. s</i>	144 Nassau St.		
Bubb, N. B., Jr., <i>Fr. s</i>	90 Nassau St.		
Buchanan, J. M., <i>Sr. s</i>	19 M D		
Bunn, B. F., <i>Fr. a</i>	12 S Ed		
BUNN, H. C., <i>Ass't. Treasurer,</i>	University Offices		

- Carton, L. R., *Fr. s* 15 Univ. Pl.
 Case, D. H., *Fr. s* 37 Wiggins St.
 Caskey, R. E., *So. a* 13 S M R
 Catherwood, W. W., *Fr. a*
 16½ Witherspoon St.
 Cavanaugh, T. B., *Fr. a* 40 U
 Cecil, J. H., *Sr. a* 161 L
 Cecil, S. R., *So. a* 161 L
 Chamberlain, B. F., *So. a*
 148 Nassau St.
 Chamberlain, F. G., *Fr. s*
 44 Van Deventer Av.
 Chambers, R. N., *Sr. a* 14 M D
 Chandlee, E. E., *Fr. s* 15 Univ. Pl.
 Chandlee, E. G., Jr., *Fr. s* 10 N D
 Chapin, D. C., *g* 115 H S
 Chapman, J., *Sr. s* 71 L
 Chapman, R. B., *Fr. s* 21 Bank St.
 Chew, B., *Sp. s* 22 Edwards Pl.
 Chew, P. F., *Fr. s* 36 Univ. Pl.
 Childs, A. E., *Fr. s* 2 L P
 Chislett, J. R., *Fr. a* 39 Univ. Pl.
 Christie, J. W., *Sr. a* 14 M D
 Churchman, C. R., *Sr. a* 171 L
 CHURCHMAN, P. H., *Instructor*,
 Absent
 Churchman, W. B., *So. a* 11 L P
 Clark, C. B., *Fr. a* Van Deventer Pl.
 Clark, H. F., *Sr. a* 11 M D
 Clark, H. N., *Fr. s* 23 Madison St.
 Clark, K. S., *Fr. a* 12 E B
 Clark, W. A., *Sr. a* 9 N R
 Clark, W. D., *Sr. a* 15 U P
 Clarke, A. F., *Sp. s* 26 Edwards Pl.
 Clarke, D., Jr., *Fr. a* 2 W M W
 Cleland, T. H., *g* 115 H S
 Clemons, W. H., *g* 22 Madison St.
 CLEVELAND, G., *Trustee*,
 58 Bayard Lane
 Cline, E. L., *So. s* 88 Nassau St.
 Cline, F. C., *Sr. s* 33 L
 Close, G. F., *g* 21 Madison St.
 Cloud, C. M., *So. s* 266 Nassau St.
 Coale, S. T., *So. a* F, S W B
 Coan, H. M., *Fr. a* 32 Mercer St.
 Cochran, M. G., *Fr. s* 39 Univ. Pl.
 Colbron, P. T., *Fr. s* 15 Univ. Pl.
 Cole, M. D., *Sr. a* 43 L
 Cole, P. G., *So. a* 3 B
 COLLINS, V. L., *Ref. Librarian*,
 31 Bank St.
 Colwell, J. I., *Sr. a* 6 W B
 Conde, L. H., *So. s* 88 Nassau St.
 Condit, F. H., *Fr. s* 168 Nassau St.
 CONEY, J. H., *Ass't Professor*,
 78 Alexander St.
 Conger, C. S., *Fr. a* 6 S E B
 Conklin, F., Jr., *Fr. s* 36 Univ. Pl.
 Conklin, L. H., *Sr. s* 38 U
 Connell, P. G., *So. s* 66 Nassau St.
 Connolly, H. J., *So. a* 5 N R
 Conner, S. D., *Fr. a* 15 N Ed
 Conwell, G. M., *Fr. a* 9 S M R
 Cooder, C. M., *Fr. s* 19 N W
 Cook, J. W., *Sr. a* 183 L
 Cook, J. W., *Sp. s* 19 Univ. Pl.
 Cook, R. B., *Fr. s* 47 Univ. Pl.
 Cooke, F. W., Jr., *Fr. s* 36 Univ. Pl.
 Coon, A. W., *Fr. s*
 34 Van Deventer Av.
 Cooney, J. L., *Fr. a* 25 M D
 Coover, C., *Fr. a* 3 S R
 Corkran, B. W., *Fr. s*
 11 Dickinson St.
 Corkran, L. G., *Sr. a* 19 M D
 Cormany, W. B., *Sr. s* 42 B
 Cornwall, E. B., *Fr. a* 9 E W
 CORNWALL, H. B., *Professor*,
 51 Nassau St.
 Corson, A., *g* 34 Wiggins St.
 Corson, Allen, *Sr. a* 34 Wiggins St.
 Cosgrave, W. B., *Sr. s* 6 S R
 Cossitt, F. H., *So. a* 31 Nassau St.
 Coughlin, G. H., *Fr. a* 5 W M W
 COVINGTON, H. F., *Ass't Professor*,
 65 B
 COWEN, J. K., *Trustee*,
 Baltimore, Md.
 Coyle, I. D., *So. a* 7 S W
 Coyle, R. F., *Fr. s* 15 Dickinson St.
 Cox, L. J., *g* 10 Madison St.
 Coxe, M., *So. a* 7 N R
 Craig, A., *So. s* 5 S M R
 CRAIG, H., *Instructor*,
 34 L
 Craig, R. G., *Fr. s* 5 S M R
 Crampton, G. C., *Sr. a* 10 N R
 Crane, J. S., *Sr. s* 8 E M W
 Cranmer, G. E., *Fr. s* 15 Univ. Pl.
 Crary, D., *Fr. s* 162 Nassau St.
 Crary, R. P., *Sr. a* 72 L
 CRAVEN, E. R., *Trustee*,
 Philadelphia
 Crawford, K. B., *Fr. a* 14 B
 Crawford, S. L., *Fr. s* 14 B
 Creighton, J. H., *Fr. s* 11 Bank St.
 Cresse, G. H., *So. a* 10 N M R

CRITCHLOW, F. L., <i>Instructor</i> , 6 S M R	Decker, S. S., Jr., <i>Sr. s</i> 152 L
Crocker, R. S., <i>Sr. a</i> 4 L P	Deems, C. P., <i>Fr. a</i> 92 B
Crosby, W. S., Jr., <i>fr. s</i> 5 W W	De Mange, R. C., <i>Sr. s</i> 141 L
Cross, J. F., Jr., <i>So. s</i> I, U	Dempster, A. A., <i>Fr. a</i>
Crothers, R. R., <i>So. s</i> 24 M D	34 Van Deventer Av.
Cudell, C. F., <i>Fr. s</i>	Denison, J. M., Jr., <i>Sr. s</i> 121 L
1 Van Deventer Pl.	Dennis, H., <i>Sr. s</i> 39 U
Culver, B. W., <i>Fr. s</i> 11 Dickinson St.	De Ridder, J. H., Jr., <i>fr. a</i> 61 L
Cummings, H. M., <i>Fr. a</i> 10 N Ed	Detsch, A. J., Jr., <i>Fr. s</i>
Cunningham, F. W., <i>Fr. s</i>	31 William St.
32 Mercer St.	De Turck, J., <i>So. a</i> 2 N Ed
Cunningham, G. S., <i>So. a</i> L, U	Devereux, W. B., Jr., <i>Sr. s</i> 2 S E B
Cunningham, J. H., <i>Fr. a</i>	Devereux, W. G., <i>Sr. s</i> 2 S E B
42 Wiggins St.	De Vinne, C. De W., <i>So. s</i>
Cunningham, W. W., <i>So. a</i> 16 U	18 Van Deventer Av.
Curtiss, J. S., <i>Fr. s</i> 36 Univ. Pl.	De Witt, J. R., <i>Sr. a</i> 181 L
Cutler, W. W., Jr., <i>So. s</i> 9 N R	Dickinson, S. M., <i>fr. s</i> 7 N D
CUYLER, C. C., <i>Trustee</i> ,	Diefenderfer, A. L., <i>Sr. a</i> 132 L
New York City	Dillon, H. L., <i>Fr. a</i> 47 Univ. Pl.
Daddow, S. H., <i>fr. a</i> 73 B	Dinsmore, F. W., <i>Sr. s</i> 171 L
Dages, O. N., <i>So. a</i> 162 Nassau St.	Dixon, G. D., Jr., <i>Sr. s</i> 7 S D
Daggette, W. M. C., <i>Fr. a</i>	DIXON, J., <i>Trustee</i> , Trenton, N. J.
11 Dickinson St.	Doak, A. H., <i>g</i> 47 B S
DAHLGREN, U., <i>Ass't. Professor</i> ,	Doane, B. Van D., <i>Sr. a</i> 6 W W
7 Evelyn Pl.	Doane, R. E., <i>So. s</i> 6 W W
Dailey, C. N., <i>So. a</i> A, U	Dobson, D. N., <i>g</i> 201 H S
Dain, N., <i>Fr. s</i> 11 Park St.	Dod, S. B., <i>Trustee</i> , Hoboken, N. J.
Dallmeyer, T. D., <i>Sp. s</i> 19 Univ. Pl.	Dodd, A. W., Jr., <i>Fr. s</i> 14 Park St.
Daniel, L. L., <i>g</i> 3 A S	Dodd, T. N., <i>fr. a</i> 2 E M W
DANIELS, W. M., <i>Professor</i> ,	Doellner, A. H., Jr., <i>fr. s</i> 5 S R
210 Mercer St.	Dong, Seung, <i>fr. a</i> 4 S D
Darlington, H. B., <i>So. s</i> A, U	Dorman, R. A., <i>So. a</i> 29 U P
Darrow, C. W., <i>g</i> 21 Madison St.	Dorsey, E. A., <i>Fr. s</i> 15 Dickinson St.
Daub, W. H., <i>Fr. s</i> 47 Univ. Pl.	Douglas, L., <i>So. a</i> 45 U
Daugherty, R., <i>Sr. a</i> 11 N M R	Douglas, R., Jr., <i>So. a</i> 3 B
Davies, J. M., <i>g</i> 56 B S	Downer, J., <i>fr. s</i> 8 S E B
Davis, B. L., <i>Sr. s</i> 63 U	Doyle, D. B., <i>fr. a</i> 43 B
Davis, D. M., <i>Fr. s</i> 21 S Ed	Doyle, L. J., <i>So. s</i> 88 Nassau St.
Davis, F. F., <i>Fr. s</i> 47 Univ. Pl.	Doyle, W. A., <i>Fr. s</i> 36 Univ. Pl.
DAVIS, J. D., <i>Trustee</i> , St. Louis, Mo.	Drake, R. W., <i>So. s</i> 12 U
Davis, J. E., <i>So. a</i> 5 N R	Draper, R. A., <i>Fr. a</i>
Davis, J. H., <i>Fr. s</i> 15 Dickinson St.	33 Van Deventer Av.
Davis, R. F., <i>So. a</i> 9 S R	Draz, C. L., <i>Fr. s</i> 53 Univ. Pl.
Davis, R. H., <i>Fr. a</i> 15 Univ. Pl.	Duff, G. M., <i>Fr. a</i> 23 L
Davis, R. T., <i>Sr. s</i> 6 S R	Duff, J. H., <i>Sr. a</i> 23 L
Davis, S. R., <i>Sp. s</i> 172 Nassau St.	Duff, M. F., <i>Fr. s</i> 190 Nassau St.
Davison, W. S., <i>So. a</i> 10 E W	Duffield, G. B., <i>Sr. a</i> 45 Nassau St.
Dawkins, C. C., <i>fr. a</i>	DUFFIELD, H. G., <i>Treasurer</i> ,
14 Van Deventer Av.	University Offices
Day, D. J. S., <i>Sr. a</i> 18 S M R	Dunbar, H. C., <i>Fr. a</i>
Deane, J. H., Jr., <i>Sp. s</i> 13 S Ed	29 Van Deventer Av.
	Duncan, R. P., <i>fr. a</i> 7 E W
	Dunlap, M. P., <i>fr. a</i> 13 N D

Dunning, L. M., <i>Jr. a</i>	10 W W	Fischer, M. A., <i>Fr. s</i>	37 Wiggins St.
Durell, T. J., <i>Fr. a</i>		Fish, H. D., <i>So. a</i>	D, W B
	Lawrenceville, N. J.	Fisher, C. A., <i>g</i>	38 B S
Durham, D. B., <i>Jr. a</i>	17 M D	FISHER, F., <i>Mechanician,</i>	
Durham, F. S., <i>So. a</i>	9 S E B		10 Dickinson St.
Durham, J. E., Jr., <i>So. a</i>	9 S E B	Fitch, J. H., Jr., <i>Sp. s</i>	
Dusenbury, E. T., <i>Fr. s</i>			40 Wiggins St.
	138 Nassau St.	Flagg, H. H., <i>Jr. s</i>	148 Nassau St.
Dutcher, B., <i>Fr. a</i>	11 Dickinson St.	Fleming, B., Jr., <i>So. s</i>	266 Nassau St.
Duvall, R. G., <i>Jr. a</i>	148 Nassau St.	Fleming, O. H., <i>Sr. s</i>	66 L
		Fleming, S. W., Jr., <i>So. a</i>	47 U
Eagan, D. C., Jr., <i>So. s</i>	88 Nassau St.	Fogel, P. H., <i>g</i>	27 William St.
Earle, D. P., <i>Jr. s</i>	3 S E B	Folz, W. H., <i>Fr. a</i>	36 S Ed
Edgar, A. J., <i>g</i>	33 A S	Foote, G. A., <i>g</i>	21 B S
Edgar, S., <i>g</i>	105 H S	Forbes, G., <i>Jr. s</i>	164 L
Edwards, D., <i>So. a</i>	7 N R	Forman, W. P., <i>Jr. s</i>	3 S W B
Edwards, D. W., <i>Sr. a</i>	1 S E B	Fornance, J. K., <i>Sr. a</i>	53 B
Edwards, H. S., <i>So. s</i>	66 Nassau St.	Forstall, J. J., <i>Sr. s</i>	4 N W
Eells, J. D., <i>Sp. a</i>	18 M D	Forsythe, R. M., <i>Sp. s</i>	
Eginton, J. W., Jr., <i>Fr. s</i>			83 Prospect Av.
	19 Univ. Pl.	Fosdick, R. B., <i>Jr. a</i>	16 N Ed
Eisele, J. L., <i>So. s</i>	11 E B	FOSTER, W., Jr., <i>Instructor,</i>	
EISENHART, L. P., <i>Instructor,</i>	63 L		24 Bank St.
Eisenhart, M. H., <i>Jr. s</i>	3 W B	Foulke, W. L., <i>Jr. a</i>	15 N D
ELLIOTT, E. G., <i>Instructor,</i>	33 B	Fowler, A. B., <i>Fr. a</i>	28 N Ed
Ely, A., Jr., <i>Jr. a</i>	3 L P	Fowler, A. K., Jr., <i>So. a</i>	E, E B
Ely, J. M., <i>So. a</i>	R, U	Fox, C. L., <i>Sr. a</i>	6 W B
English, C. C., <i>Jr. s</i>	7 S R	Fox, F. B., <i>Jr. a</i>	6 E M W
Eppley, M., <i>So. s</i>	15 L P	Fox, G., Jr., <i>Sr. s</i>	5 S W
Etherington, S. G., <i>So. s</i>		Francke, F. R., Jr., <i>Sp. s</i>	
	66 Nassau St.		88 Nassau St.
Euwer, E. C., <i>Sp. a</i>	9 E W	Frank, A. G., <i>g</i>	209 H S
Euwer, W. C., <i>Fr. s</i>	138 Nassau St.	Frank, H. M., <i>g</i>	209 H S
Evans, G. W., <i>So. s</i>	19 N W	Frankel, H., <i>Sr. s</i>	54 B
Evans, J. W., <i>Fr. a</i>	16 B S	Franklin, C. J., <i>Fr. s</i>	
Everts, E. E., <i>Fr. s</i>	430 Nassau St.		15 Dickinson St.
Ewing, W. K., <i>So. a</i>	15 B	Franklin, W. H., <i>So. a</i>	9 E B
		FRAZER, D. R., <i>Trustee,</i>	
Fager, P., <i>Fr. s</i>	B, W B		Newark, N. J.
Fairing, R. P., <i>So. a</i>	Mercer Manor	Freeman, H. W., Jr., <i>So. s</i>	1, U
Fairlie, C. W., <i>Fr. s</i>	60 Univ. Pl.	Freeman, J. E., <i>Fr. s</i>	92 B
Fales, M. S., <i>Jr. a</i>	1 S M R	Freeman, W. C., <i>So. s</i>	24 U P
FARR, M. S., <i>Assistant,</i>	12 Maple St.	Frederick, K. T., <i>g</i>	8 N W
Farr, T. H. P., Jr.,	10 L P	Frelinghuysen, P. H. B., <i>Sr. a</i>	7 L P
Farrell, F. I., <i>Fr. a</i>	31 N Ed	French, F. F., <i>Sp. a</i>	36 Univ. Pl.
Fayerweather, C. S., <i>Jr. s</i>	7 B	Frick, C., <i>Jr. s</i>	112 L
Felgenhauer, F. J., <i>Fr. s</i>	F, U	Froelick, L. D., <i>So. a</i>	31 L
Fellows, E. P., <i>Sr. a</i>	3 E M W	FROTHINGHAM, A. L., <i>Professor,</i>	
Ferris, E. F., Jr., <i>Jr. a</i>	8 S R		Hodge Av.
Fetherolf, W. P., <i>g</i>	5 N Ed	Fulcher, G. S., <i>g</i>	415 H S
FINE, H. B., <i>Dean,</i>	73 Nassau St.	Fuller, H. M., <i>Jr. a</i>	95 B
FINE, J. B., <i>Director,</i>	Prep. School	Fullerton, D. H., <i>Fr. a</i>	
Finney, H. G., <i>g</i>	310 H S		8 Chestnut St.

Funk, E. D., <i>Fr. a</i>	1 N Ed	Graham, G., <i>So. s</i>	73 U
Funk, J. C., <i>fr. a</i>	3 W B	Gray, A. E. N., <i>So. s</i>	10 N W
Furman, B. A., <i>So. a</i>	20 N W	Gray, T. F. N., <i>So. s</i>	10 N W
		Green, B. M., <i>Fr. s</i>	
Gaines, A. B., Jr., <i>fr. s</i>	16 L		14 Van Deventer Av.
Galt, C. F., <i>Fr. a</i>	22 L	Green, C. S., <i>Fr. a</i>	19 Univ. Pl.
Galt, R. B., <i>So. a</i>	22 L	Green, G. F., <i>Fr. s</i>	2 Nassau St.
Galvin, T. F., Jr., <i>Fr. s</i>	2 N W	Green, G. R., <i>fr. a</i>	27 M D
Gamble, C. H., <i>fr. a</i>	12 B	GREEN, H. W., <i>Trustee,</i>	
Gardiner, J. J., <i>Sp. s</i>	153 L		Trenton, N. J.
GARFIELD, H. A., <i>Professor,</i>		Greene, C. W., <i>So. a</i>	11 S M R
	49 Library Pl.	Greenland, H. B., <i>So. s</i>	29 U P
Garretson, J., <i>Fr. a</i>	33 Edwards Pl.	Greenwood, J. R., <i>fr. s</i>	2 E B
Garrison, C., <i>Sr. a</i>	9 M D	Greski, T., <i>Sp. a</i>	22 N Ed
Garrison, R. A., <i>fr. a</i>		Griffith, M. E., <i>fr. s</i>	52 B
	92 Stockton St.	Grigg, A. W., <i>g</i>	103 H S
Gaskins, P. L., <i>fr. s</i>	14 N W	Griggs, D. C., <i>fr. a</i>	10 E M W
Gee, H. J., <i>Fr. a</i>	36 Univ. Pl.	Grimes, J. L., <i>fr. s</i>	3 S E B
Gehrken, J. H., <i>So. s</i>	4 S W B	Gross, A., <i>g</i>	11 N E
George, R. M., <i>Fr. s</i>	34 Bank St.		
Gerhard, E. A., <i>So. a</i>	12 U	Haberman, H. W., <i>Fr. s</i>	2 Nassau St.
German, G. T., <i>So. a</i>	9 S W	Hagan, H., <i>Fr. a</i>	8 Dickinson St.
Geyer, B. W., <i>Fr. s</i>	11 Park St.	Hagar, F. K., <i>Sr. a</i>	133 L
Gibbens, C. B., <i>Fr. s</i>	11 Bank St.	Hague, W. E., <i>Sr. s</i>	185 L
Gibby, H. J., <i>Sr. a</i>	3 W W	Haight, H. W., <i>Fr. a</i>	33 U
Gibson, B. H., <i>So. s</i>	6 E B	Hale, P. M., <i>So. s</i>	7 S E B
Gilchrist, J. K., <i>Fr. s</i>	138 Nassau St.	HALL, A. C., <i>Instructor,</i>	
Gilchrist, J. P., <i>So. s</i>	5 W B		27 William St.
Gill, P. L., <i>fr. a</i>	12 S E B	HALL, J. P., <i>Instructor,</i>	26 Bank St.
GILLESPIE, W., <i>Instructor,</i>		Hallett, N., <i>Fr. s</i>	4 W M W
	10 Nassau St.	Halliday, H. B., <i>fr. a</i>	13 B
Gilmore, J., <i>So. a</i>	14 S M R	Halsey, E. C., <i>Fr. s</i>	173 Nassau St.
Gittings, J. C., Jr., <i>Fr. s</i>		Halsted, D., <i>Fr. a</i>	15 Univ. Pl.
	45 Univ. Pl.	Hamblen, A. A., <i>fr. a</i>	4 N M R
Glass, F. P., <i>So. a</i>	50 U	Hamilton, D. C., <i>fr. s</i>	54 B
Goas, H. J., <i>So. a</i>	14 N M R	Hamilton, S., <i>So. a</i>	L, U
Goas, H. Z., <i>Fr. a</i>	14 N M R	Hamilton, T. P., <i>So. a</i>	N, U
GOLDIE, G., <i>Director,</i>	35 Univ. Pl.	Hammond, E. F., <i>g</i>	37 A S
Goldsborough, L. T., <i>Fr. s</i>		Hampson, A. C., <i>Fr. s</i>	37 William St.
	88 Nassau St.	Handley, L. A., <i>g</i>	111 H S
Goldsmith, G. M., <i>Sr. a</i>	133 L	Haney, H. S., <i>Fr. a</i>	1 S Ed
Good, T. R., <i>Sr. a</i>	305 H S	Hansi R. H., <i>Fr. a</i>	23 Edwards Pl.
Goodeno, J. M., <i>So. s</i>	266 Nassau St.	Hardenbergh, T. E., Jr., <i>Sr. s</i>	38 L
Goodman, K. S., <i>So. s</i>	86 Nassau St.	Hardin, W. J., <i>Fr. a</i>	26 N Ed
Goodrich, L., <i>So. s</i>	15 S D	Hardy, E. C., <i>So. s</i>	1 E M W
Goodwin, F. L., <i>Fr. a</i>	31 Univ. Pl.	HARPER, G. M., <i>Professor,</i>	
Gopsill, J. W., <i>So. a</i>	17 S W		36 Mercer St.
Gordon, J. C., Jr., <i>Fr. a</i>	31 Univ. Pl.	Harris, A., <i>So. a</i>	41 N Ed
Gordon, P., <i>Sp. s</i>	70 U	Harris, F. M., <i>Fr. s</i>	138 Nassau St.
Gordon, W. S., Jr., <i>Fr. s</i>	12 Park St.	Harris, H., <i>fr. a</i>	16 S M R
Graham, C. C., <i>Fr. a</i>	40 N Ed	HARRIS, W. B., <i>Professor,</i>	
Graham, E. A., <i>Sr. a</i>	5 E M W		280 Nassau St.
Gramger, F. S., <i>fr. s</i>	31 B	Harrison, B. B., <i>g</i>	65 B S

Hart, H. R., <i>Jr. a</i>	153 L	Hill, M. C., <i>Sr. s</i>	19 M D
Hart, J. F., <i>Fr. a</i>	29 N Ed	Hill, R. R., <i>Sp. s</i>	12 N W
Hart, P. G., <i>Sp. a</i>	9 B	Hilliard, E. H., <i>Jr. a</i>	6 W M W
Hartman, W. L., <i>Sr. a</i>	3 E W	Hinds, R., <i>So. a</i>	12 W B
Hartzell, J. L., <i>Fr. a</i>	2 S Ed	Hinrichsen, C. F. <i>Fr. s</i>	23 William St.
Harvey, T. W., Jr., <i>Jr. s</i>	15 W W	Hirsch, W. A., <i>Jr. a</i>	6 E W
Hasbrouck, B., <i>So. s</i>	20 S W	Hirt, W. E., <i>Sr. a</i>	8 W M W
Haskell, F. K., <i>Jr. s</i>	7 E M W	Hoag, R. C., <i>So. a</i>	12 S D
Hastings, G. E., <i>Sr. a</i>	10 E W	Hoagland, A. N., <i>So. s</i>	11 E B
Hatch, A. P., <i>So. s</i>	74 B	Hobbie, T., <i>Fr. s</i>	13 N W
Hatton, F. H. H., <i>g</i>	47 Univ. Pl.	Hobbs, A. L., <i>Fr. a</i>	42 Wiggins St.
Hattori, B., <i>g</i>	41 S Ed	HODGE, <i>Trustee</i> , Wilkes-Barre, Pa.	
Haulenbeck, R. F., <i>Fr. a</i>	44 Wiggins St.	Hodges, S. E., <i>g</i>	66 B S
Haven, W. Le R., Jr., <i>Fr. a</i>	23 William St.	Hoe, P. S., Jr., <i>Jr. a</i>	8 S R
Havens, F. C., <i>So. a</i>	9 E B	Hoer, F. J., <i>So. a</i>	22 B
Hay, W. W., <i>So. a</i>	5 N W	Hoff, R. B., <i>Sr. a</i>	143 L
Hayden, H. E., Jr., <i>Jr. a</i>	10 S W B	Hoge, T. C., Jr., <i>Fr. s</i>	19 Univ. Pl.
Hayes, M. C., <i>So. s</i>	42 U	Holbrook, R., <i>So. s</i>	4 U
Hazard, W., <i>So. s</i>	16 Van Deventer Av.	Holden, E. P., Jr., <i>So. a</i>	71 B
Hazlehurst, A., Jr., <i>Sr. a</i>	141 L	Holden, J., <i>Jr. a</i>	51 L
Heard, J. J., <i>Sr. a</i>	8 W M W	Holland, M. B., <i>Jr. a</i>	7 U
Heath, N. A., <i>Jr. s</i>	90 Nassau St.	Hollenbach, W. F., <i>g</i>	211 S. Clinton Av., Trenton, N. J.
Heath, S. R., <i>Fr. s</i>	32 Mercer St.	Holliday, R. F., <i>Sp. s</i>	1 N D
Hegeman, R. F., <i>So. a</i>	20 Alexander St.	Holt, C. B., <i>Fr. a</i>	304 H S
Heisler, W. H., Jr., <i>Jr. a</i>	7 S R	Holt, S. T., <i>se</i>	5 E W
Hemingway, H. C., <i>Sp. s</i>	19 E W	Holzhauser, C. W., <i>Sp. a</i>	24 L
Hendrickson, J. A., <i>Fr. a</i>	33 Ed. Pl.	Hooks, D. M., <i>Fr. a</i>	38 N Ed
Henricks, W. A., <i>Fr. a</i>	8 S Ed	Hoopes, E. L., <i>Sr. s</i>	8 S E B
Henry, A., Jr., <i>Fr. s</i>	32 Wiggins St.	Hopkins, G. A., <i>So. s</i>	24 Edwards Pl.
HENRY, B., <i>Trustee</i> , Philadelphia		Hopkins, G. D., <i>Fr. a</i>	18 S M R
Henry, C. P., <i>Jr. s</i>	6 S E B	Horn, H. S., <i>Sr. s</i>	39 U
Henry, H. H., <i>Sr. a</i>	184 L	Horn, J. F., <i>g</i>	300 H S
HENRY, J. A., <i>Trustee</i> , Philadelphia		Horn, J. H., <i>Fr. s</i>	22 Edwards Pl.
Henry, P. H., <i>Sr. a</i>	14 S W	Hornblower, G. S., <i>Sr. a</i>	10 U P
Henson, H., <i>Sr. a</i>	3 E M W	Hornblower, L. W., <i>Sr. a</i>	7 U P
Herold, H. C. H., Jr., <i>Fr. a</i>	60 Univ. Pl.	Horner, C., <i>Jr. a</i>	12 Park St.
Herr, O. A., <i>Jr. a</i>	B, W B	Horton, C. T., <i>Fr. s</i>	32 B
Herrick, H. T., <i>Fr. a</i>	14 Van Deventer Av.	HOSKINS, J. P., <i>Professor</i> ,	22 Bank St.
Herring, D. G., <i>Fr. a</i>	2 Nassau St.	Hovey, F. A., <i>So. a</i>	62 U
Herron, J. A., Jr., <i>Fr. s</i>	138 Nassau St.	Howard, R. C., <i>Jr. s</i>	164 Nassau St.
Hewitt, J. F., <i>Fr. a</i>	53 Univ. Pl.	Howe, F. R., <i>So. s</i>	16 N W
HIBBEN, J. G., <i>Professor</i> ,	62 Washington Road	Howell, E. O., Jr., <i>Fr. a</i>	9 S Ed
Higbie, H. S., <i>So. s</i>	12 Univ. Pl.	Howie, B., <i>So. a</i>	172 Nassau St.
Hildreth, W. W., <i>So. a</i>	N, U	Hoyt, R. E., <i>Jr. s</i>	44 B
Hill, F. S., <i>So. a</i>	9 W W	Hoyt, W. S., <i>So. a</i>	E, U
		Hubbard, L. M., Jr., <i>Jr. s</i>	1 W M W
		Hubbell, S. B., <i>Fr. s</i>	34 Wiggins St.
		Hudson, H. H., <i>Sr. a</i>	2 S Ed
		Hughes, M. G., <i>Sr. s</i>	124 L
		Hull, R. A., <i>Jr. a</i>	4 N R

Hulsizer, W. H., *Fr. s* 32 Mercer St.
Hulsizer, W. R., *Fr. a* 34 Mercer St.
Hummer, W., *Fr. s* 22 Madison St.
HUN, J. G., *Instructor*,
The Bachelors
HUNT, T. W., *Professor*,
48 Library Pl.
Hunter, G. C., *Sr. a* 17 S M R
Hunter, L., *Jr. a* 5 N D
Hunting, G. N., *Fr. a* 41 Univ. Pl.
Hustead, J. E., *Sp. a* 15 B
Hutchison, W. M., *g* 410 H S
HUTSON, F. L., *Instructor*,
26 Bank St.
HUTTON, *Lecturer*, Mercer Heights
Huyler, C. D., *Fr. s* 15 Univ. Pl.
Hyde, J. L., *Sp. a* 10 S Ed
Hyde, W. M., Jr., *Fr. a* 10 S Ed
Ill, E. A., *Sp. s* 110 Nassau St.
Inch, P. L., *So. s* 164 Nassau St.
Irwin, J. R., *So. s* 15 S D
Irwin, W., *Jr. a* 4 N R
Isett, W. C., *g* 313 H S
Jack, H. M., *Sp. s* 164 Nassau St.
Jackson, F. W., *Sr. a* 14 L
Jackson, J. K., *So. a* 10 S W
JACOBUS, M. W., *Trustee*,
Hartford, Conn.
Jagger, A., *Sr. a* 14 S W
James, L. N., *Sp. s* 66 Nassau St.
James, N., *Sp. s* 47 Univ. Pl.
Jamieson, E. S., *Fr. a*
44 Van Deventer Av.
Janeway, L. P., *Sr. a* 4 S E B
Janvrin, E. R. P., *Jr. a* 5 M D
Jenanyan, S. S., *Fr. a* 2 N Ed
Jennings, M. W., *Sp. s*
16 Chambers St.
Jenvey, A. C., *Sr. s* 23 U P
Johnson, J., *So. s* 136 Nassau St.
Johnson, L. Z., *g*
109 Witherspoon St.
Johnson, M. McC., *Fr. a*
29 Van Deventer Av.
Johnson, R. K., *Fr. s*
46 Van Deventer Av.
Johnson, S., Jr., *So. s* 88 Nassau St.
Johnson, W. F., Jr., *Jr. a* 7 U
Johnston, H. A., *g* 94 B
Joline, J. F., Jr., *Fr. a*
36 Wiggins St.

JONES, D. B., *Trustee*, Chicago, Ill.
Jones, D. R., *Fr. a* 42 S Ed
Jones, H. S., *Jr. a* 6 W M W
Jones, J. R., *Sp. s* 33 U P
Jones, L., *Sp. s* 5 N M R
Jones, L. C., *Fr. s* 31 Univ. Pl.
Jones, R. H., Jr., *So. a* E, U
Jones, W. A., Jr., *Fr. s* 25 Bank St.
Jones, W. A., Jr., *Sp. s*
24 Edwards Pl.
Julier, H. V., *Sr. s* 38 L
Justis, J. A., *Sr. a* 131 L
Kafer, J. D., *Jr. s* 1 B
Kahler, H. C., *So. a* 3 N R
Kahler, H. McN., *Sr. a* 3 N R
KALLEN, H. M., *Instructor*,
24 Bank St.
Kallina, E. J., *So. a* 30 Mercer St.
Kampmann, I. S., *Jr. a* 10 N D
Kane, G., Jr., *Jr. a* 16 Alexander St.
Karow, E., Jr., *Sp. s* 2 W B
Katzenbach, W. S., *Sr. a* 154 L
Kaufmann, R. M., *Jr. a* 12 E W
Kays, W. T. A., *Sr. s* 21 B
Keeney, G. A., Jr., *Fr. s* 16 B
Keepers, W. L., *Fr. a*
37 Wiggins St.
Keith, J. S., *Sr. a* 9 N D
Keith, H. H., *So. s* 13 Park St.
Keith, R., *Fr. s* 31 Univ. Pl.
Kellogg, E. W., *Sp. s* 9 S R
KELLOGG, O. D., *Instructor*, 151 L
Kellogg, R. W., *So. a* 203 H S
Kelso, W. G., Jr., *Jr. a* 17 W W
Kempf, J. A., *g* 75 B S
Kenly, P. H., *Sr. a* 121 L
Kennedy, D. D., *Sr. a* 17 W W
Kennedy, F., *So. s* 18 N W
Kennedy, W. G., *Sr. a* 3 S Ed
Kepner, W. A., *g* 7 N Ed
Kerper, J. F., Jr., *Fr. s*
16 Chambers St.
Kerr, B. W., *So. s* 15 S M R
Kerr, H. I., *g* 415 H S
Kerr, W. C., *Sr. a* 15 S M R
Kerr, W. McC., *Fr. a* 45 B S
Kershaw, W. E., *Sp. a* 93 B
Kessler, H. C., Jr., *Jr. s* 5 W M W
Keyes, R. W., *Jr. s* 8 E W
Kidney, R. S., *Fr. s* 9 N W
Kienbusch, C. O. v., *So. a*
90 Nassau St.

Kilpatrick, G. W., <i>Fr. a</i>		Lichty, B. R., <i>Sr. s</i>	6 B
	168 Nassau St.	Liggett, T., Jr., <i>So. s</i>	110 Nassau St.
Kimball, D. E., <i>Sp. s</i>	60 U	Lightcap, H. B., Jr., <i>So. a</i>	8 N M R
Kimball, W. D., <i>Sr. s</i>	38 U	Limerick, F. B., <i>Jr. a</i>	37 N Ed
Kimberly, D. L., <i>Fr. s</i>	11 Park St.	Lindholm, C. F., <i>Sr. a</i>	4 S R
King, A. F., <i>Jr. s</i>	51 L	Lindsey, E. W., <i>Sr. a</i>	5 E B
King, R., <i>Sr. a</i>	35 U P	Lithgow, L. G., <i>Fr. a</i>	40 S Ed
Kirkman, R., <i>Sp. s</i>	52 Univ. Pl.	Littell, W. B., <i>Jr. a</i>	34 B
Kirkpatrick, J. P., <i>Sr. s</i>	132 L	Little, E. H., <i>Jr. a</i>	32 L
Kirkpatrick, L., <i>So. a</i>	42 L	LITTLE, H. S., <i>Trustee</i> ,	
Kline, F. L., <i>So. a</i>	D, U		Trenton, N. J.
Knight, L. L., <i>g</i>	317 H S	LITTMANN, E., <i>Lecturer</i> ,	
Koch, S. L., <i>Jr. a</i>	3 N R		14 Nassau St.
Koehler, E. J., <i>Jr. s</i>	12 S E B	Lloyd, H., <i>Jr. a</i>	11 S W
Kohler, H. R., <i>Fr. s</i>	6 N M R	Lloyd, J. P., <i>Sr. a</i>	15 N R
KOREN, W., <i>Instructor</i> ,	2 W W	Lloyd, W. H., <i>So. a</i>	15 N W
Kouwenhoven, C. B., <i>Fr. s</i>		Loeb, I. J. S., <i>Jr. s</i>	6 N R
	39 Van Deventer Av.	LONG, A. W., <i>Instructor</i> ,	11 B
Krause, A. K., <i>Fr. a</i>	1 S Ed	Long, S. M. B., <i>Sr. a</i>	9 E M W
Krecker, F. H., <i>Sr. a</i>	1 S R	Longcope, T. M., Jr., <i>Jr. s</i>	7 S R
		Look, H. S., <i>Fr. s</i>	72 U
La Forge, F. B., <i>Jr. s</i>	12 W W	LOOMIS, E. H., <i>Professor</i> ,	
Laidlaw, E. C. R., <i>Sp. s</i>	47 Univ. Pl.		302 Nassau St.
Laidlaw, R. R., <i>Sr. a</i>	98 B	Losey, L. A., <i>Fr. a</i>	34 Bank St.
Laird, D., <i>So. s</i>	52 L	Lothrop, G. Van N., <i>Fr. a</i>	
Lamberton, C. D., <i>g</i>	63 B S		90 Nassau St.
Landis, R. K., <i>Fr. a</i>	94 B	Louderbough, J. J., <i>Fr. a</i>	
Langmann, H. W., <i>Fr. a</i>	19 W W		14 Van Deventer Av.
Larned, A. C., <i>Fr. a</i>	19 Univ. Pl.	Love, G. S., <i>Fr. a</i>	24 Chambers St.
Larzelere, C. T., <i>Fr. s</i>	15 Univ. Pl.	LOVETT, E. O., <i>Professor</i> ,	
Larzelere, J. L., <i>Jr. s</i>	7 E M W		73 Prospect Av.
Latham, C., Jr., <i>Sr. s</i>	1 N M R	Luckenbach, J. L., <i>Sp. s</i>	
LAUGHLIN, J., <i>Trustee</i> ,			18 Van Deventer Av.
	Pittsburg, Pa.	Lunn, A. W., <i>Fr. a</i>	60 Univ. Pl.
Lawson, J. S., <i>Sp. s</i>		Lyman, C. G., <i>Sp. a</i>	24 Chambers St.
	83 Prospect Av.	Lynn, E. A., <i>Sr. a</i>	2 Nassau St.
Leake, R. H., Jr., <i>Jr. a</i>	3 N D	Lyon, C. A., <i>Jr. a</i>	6 W M W
Leaming, R. S., <i>So. s</i>	4 E B	Lyons, G. P., <i>Sp. a</i>	62 U
Leavitt, H. H., Jr., <i>Jr. a</i>	15 S W	Lyons, H. C. C., <i>So. s</i>	3 M D
Lee, J. L., <i>Sr. a</i>	64 L		
Leitch, R. I., <i>Fr. s</i>	166 Nassau St.	MacCartney, C. E., <i>g</i>	117 H S
Leslie, E. H., <i>So. a</i>	7 S W B	MacCauley, H., <i>Jr. a</i>	4 W W
Letts, F. C., <i>So. s</i>	15 U	MacCoy, W. L., <i>So. a</i>	H, U
Levis, C. C., <i>Fr. s</i>	45 Univ. Pl.	MacCrellish, W. H., <i>Jr. a</i>	5 U P
LEWIS, E. S., <i>Professor</i> ,	20 Bank St.	Macdonald, G., Jr., <i>So. a</i>	1 L P
Lewis, W. D., <i>Jr. a</i>	21 M D	MacDonald, J. J., <i>g</i>	11 S Ed
Lewisohn, S. A., <i>Sr. a</i>	90 Nassau St.	Machen, J. G., <i>g</i>	309 H S
Lewman, H. P., <i>Fr. a</i>		MacKay, W. A., <i>g</i>	210 H S
	11 Dickinson St.	Mackenzie, C. A., <i>So. a</i>	83 B
LIBBEY, W., <i>Professor</i> ,		Mackie, A., <i>Fr. a</i>	19 N Ed
	20 Bayard Lane	Mackimmie, A. A., <i>Sp. a</i>	19 S Ed
Libby, F. O., <i>So. a</i>	C, U	Mackintosh, F. G., <i>g</i>	206 H S
Lichtenberger, J. B., <i>Sr. a</i>	4 S R	MacLeod, F. L., <i>Sr. a</i>	208 H S

MACCLOSKEY, G., <i>Professor</i> , 239 Nassau St.	McBride, H. C., <i>g</i> 208 H S
Macpherson, D. F., <i>So. a</i> 42 L	McCallum, D., <i>So. s</i> 49 U
Macpherson, J. F., <i>So. a</i> 17 N W	McCarthy, D. F., <i>So. s</i> 169 Nassau St.
Madden, F. L., <i>Sr. a</i> 134 L	MCCAY, L. W., <i>Professor</i> , 257 Nassau St.
Madden, J. D., Jr., <i>Fr. a</i> 134 L	McClave, R. P., <i>Sp. s</i> 23 U P
Maddux, C. V., <i>fr. a</i> 2 S M R	McClay, S. K., <i>Fr. s</i> 32 B
Magee, E. H., <i>fr. a</i> 9 B	McClenaghan, H., <i>g</i> 207 H S
MAGIE, D., Jr., <i>Instructor</i> , Absent	McCLENAHAN, H., <i>Asst. Professor</i> , 12 Bank St.
Magie, J. McC., <i>Sr. a</i> 60 Library Pl.	McClintock, A. T., <i>Fr. a</i> 39 Univ. Pl.
MAGIE, W. F., <i>Professor</i> , 78 Library Pl.	McClintock, C. A., <i>Fr. a</i> 15 Dickinson St.
MAGIE, W. J., <i>Trustee</i> , Elizabeth, N. J.	McClure, A., Jr., <i>So. a</i> 6 N W
Mahany, D., <i>Fr. s</i> 16 Van Deventer Av.	McCLURE, C. F. W., <i>Professor</i> , 257 Nassau St.
Malcolm, G. H., <i>fr. s</i> 8 W B	McClure, J. C., <i>So. s</i> 6 N W
Maltman, J. S., <i>2 e</i> 5 Prospect Av.	McCombe, J. W., <i>g</i> 54 B S
Man, E. A., <i>fr. a</i> 6 B	McCook, J. J., <i>Trustee</i> , New York City
Mann, P. C., <i>fr. a</i> 2 E M W	MCCORMICK, C. H., <i>Trustee</i> , Chicago, Ill.
Manness, S., <i>Fr. s</i> 27 Mercer St.	McCormick, F. C., <i>Fr. s</i> 162 Nassau St.
Mapes, C. D., <i>Fr. a</i> 36 Univ. Pl.	McCormick, W. L., <i>g</i> 37 B S
Markham, A. W., <i>Fr. s</i> 2 Nassau St.	McCoy, W., <i>g</i> 400 H S
Marple, W. S., <i>Sp. a</i> 12 A S	McCoy, W. M., <i>Sr. a</i> 182 L
MARQUAND, A., <i>Professor</i> , Guernsey Hall	McCracken, F. B., <i>Fr. s</i> 173 Nassau St.
Marquis, C. DuB., <i>Sp. a</i> 11 S M R	McCrary, I. J., <i>Fr. s</i> 15 Dickinson St.
Marsh, E. C., <i>Fr. s</i> 32 Wiggins St.	McCreary, G. D., Jr., <i>So. s</i> 11 W W
Marsh, F. R., <i>g</i> 27 B S	McCutcheon, N. L., <i>So. s</i> 266 Nassau St.
Marsh, H. L., <i>Fr. s</i> 33 Edwards Pl.	McDermott, F. P., <i>1 e</i> 15 N M R
Martin, J., <i>Fr. a</i> 92 B	McDonald, J. O., <i>fr. a</i> 17 M D
Martin, J. L., <i>Fr. a</i> 172 L	McELROY, R. M., <i>Asst Professor</i> , 86 Stockton St.
Mason, J. G., Jr., <i>fr. a</i> 34 U	McEwen, K. M., <i>So. a</i> 35 B S
Mason, W. L., <i>Sp. s</i> 72 B	McGiffert, J. E., <i>So. a</i> 136 Nassau St.
Mather, C. N., <i>Fr. s</i> 2 Nassau St.	McIlvain, W. B., <i>Fr. s</i> 19 Univ. Pl.
Mathews, C. H., Jr., <i>fr. a</i> 64 B	McIlvaine, F. S., <i>Sr. s</i> 4 W B
Mathews, E. G., <i>Fr. s</i> 2 U	McIlvaine, R. B., <i>fr. a</i> 15 S Ed
Mathews, T. R., <i>Sp. a</i> 13 N Ed	McIntyre, N. W., <i>Fr. a</i> 15 Univ. Pl.
Matter, J., <i>fr. s</i> 14 E W	McKee, G. R., <i>So. s</i> 4 E M W
Matteson, J. L., <i>Sr. a</i> 8 E M W	McKee, J. D., <i>Fr. s</i> 138 Nassau St.
Matthal, J. C., <i>Fr. s</i> 19 U	McKelvy, F. G., <i>Sr. a</i> 11 E W
Matthews, L. W., <i>g</i> 61 B S	McKinlay, E. L., <i>fr. a</i> 83 B
Matthews, W., <i>Fr. a</i> 27 Mercer St.	McKinnon, M., <i>Sp. a</i> 25 N Ed
Maurice, A. T., <i>So. a</i> 70 U	
Mauzy, A. G., <i>Fr. s</i> 33 Edwards Pl.	
Mayer, P. H., <i>fr. s</i> 20 M D	
Mayers, J. M., <i>fr. a</i> 34 B	
McAlpin, A. H., <i>Fr. s</i> 47 Univ. Pl.	
MALPIN, C. W., <i>Secretary</i> , Chancellor Green Library	
McAlpin, K. R., <i>fr. a</i> 35 U	
McAusland, R. H., <i>Fr. s</i> 45 Univ. Pl.	

- McLAUCHLAN, W. H., *Instructor*, 91 B
 McLaury, F. H., *Sr. a* 3 S W
 McLean, D., *Fr. a* 173 Nassau St.
 McLean, W. E., *Fr. a* 14 S M R
 McLeod, A. A., Jr., *So. a* 17 Boudinot St.
 McLure, N. R., *Sr. s* 3 S M R
 McMillan, A., *Sp. s* 40 Bayard Lane
 McMILLAN, C., *Professor*, 40 Bayard Lane
 McMillan, F. C., *So. s* 40 Bayard Lane
 McNaughton, J., *So. s* T, U
 McNiece, I., *Fr. a* 2 N R
 McPherson, O. H., *Sp. a* 17 B
 MCPHERSON, S. J., *Trustee*, Lawrenceville, N. J.
 McWILLIAMS, E. C., *Instructor*, 23 Edwards Pl.
 Meacham, J. B., *g* 49 B S
 Menefee, A. B., *Fr. s* 11 Dickinson St.
 Messler, B. E., *g* 27 S Ed
 Messler, D. I., *So. a* 6 M D
 Messler, J. S., *Fr. a* 21 L
 Merrick, H. M., Jr., *Sr. s* 1 S W
 Metcalfe, D., *Sr. s* 10 S R
 Mierow, C. C., *Fr. a* 44 Mercer St.
 Miles, A. R., *Fr. a* F, U
 Miles, J. D., *Sr. s* 96 B
 Miller, C. F., *Fr. s* 19 Univ. Pl.
 Miller, E. M., *Sr. s* 3 S D
 Miller, E. McK., *Fr. s* 16 B
 Miller, F. C., *Sr. a* 6 M D
 Miller, J., *So. a* 1 S R
 Miller, P. J. G., *Sr. a* 1 S R
 Milliken, H. O., *Fr. a* 9 W M W
 Mills, H. L., *Sr. a* 54 L
 Milton, H. S., *Fr. a* 43 B
 Minott, H., *Fr. a* 162 L
 Mitchell, W. M., *g* 27 William St.
 Mixsell, H. R., *So. a* 9 S W B
 Moffett, G. M., *Sr. a* 54 B
 Monie, C. C., *Fr. a* 3 W W
 Moon, E. J., *Fr. s* 138 Nassau St.
 Moore, F. S., *Fr. a* 2 N R
 Moore, H., *Fr. s* 12 E B
 Moore, H. L., *So. s* 266 Nassau St.
 Moore, P. A., *Sr. a* 44 L
 Moore, S. L., *Sr. a* 10 S R
 MORGAN, J. S., *Associate Librarian*, Stockton St.
 Morgan, S. McK., *Fr. s* 31 Univ. Pl.
 Morgan, T., *g* 315 H S
 Morrell, J. G. DeW., *s c* 88 Library Pl.
 Morrell, P. E., *Fr. s* 8 S W B
 Morrill, G. L., *g* 407 H S
 Morris, L. S., *So. s* 1 L P
 Morris, McL. F., *Fr. a* 8 Dickinson St.
 Morris, R. H., *g* 22 Dickinson St.
 Morrison, J. A., *Sp. s* 12 S M R
 Morrow, E. B., *Sr. a* 10 S W
 Morton, S., *So. s* 1 U
 Mosher, V. W., *Sr. s* 6 B
 Motter, W. C., *Sp. a* 14 E W
 Mount, H., *Fr. a* 3 S R
 Moyer, W. T., *Fr. a* 15 N Ed
 Mowry, T. C., *Fr. a* 15 L
 Mulford, L. F., *Fr. s* 32 Wiggins St.
 Mullen, F. W., Jr., *Fr. a* 21 M D
 Muller, J. A., *Fr. a* 8 N Ed
 Mulock, E. McC., *g* 41 A S
 Mulry, G. W., *Sp. s* 11 Bank St.
 Munn, J. S., *So. s* 66 Nassau St.
 Munn, O. D., Jr., *So. s* 15 L P
 Murfree, M. B., *Fr. a* 9 N M R
 MURPHY, Gov. F., *Trustee*, Trenton, N. J.
 Murray, C., Jr., *Fr. a* 21 Bank St.
 Murray, L. F., *Sp. a* 6 S W
 Musser, C. A., *So. a* 66 U
 Myers, D. R., *Sr. a* 2 S W B
 Nash, D. H., Jr., *Fr. s* 162 Nassau St.
 Nash, F. J., *So. a* 70 U
 Nason, F. R., *So. a* 17 E W
 NEHER, F., *Professor*, 95 Mercer St.
 Neill, G. G. E., *Fr. a* 138 Nassau St.
 Neis, W. C., *So. a* 7 M D
 Nelson, S. F., *Sp. a* 5 S D
 Nesbitt, J. A., *g* 409 H S
 Neustadt, R. G., *Fr. s* 138 Nassau St.
 Nevin, C. C., *So. s* 266 Nassau St.
 Nevin, E. D., *Fr. s* 68 L
 Newcomb, L. W., *Fr. s* 29 S Ed
 Newell, J. A., *Fr. a* V, U
 Newman, H. E., *Sr. a* 96 B
 Nicholl, J. S., *Sp. s* 18 S W
 Nicholls, C. C., Jr., *So. a* 2 B
 Nicholson, A. D., *Sp. s* 90 Nassau St.

Nicholson, G. B., <i>So. s</i>	90 Nassau St.	PARROTT, T. M., <i>Professor</i> ,	104 Mercer St.
Nickerson, J., Jr., <i>Jr. s</i>	44 B	PATTON, F. L., <i>Ex-President</i> ,	Springdale
Noble, H. B., <i>Sr. s</i>	10 S R	PATTON, G. S., <i>Professor</i> ,	Springdale
Norton, P., <i>Fr. a</i>	20 S Ed	Paul, A. S., <i>Sp. s</i>	10 N D
Nuelle, J. H., <i>So. s</i>	25 M D	PAXTON, W. M., <i>Trustee</i> , Princeton	
Nutt, J. B., <i>Fr. a</i>	90 Nassau St.	Payne, E. D., <i>Jr. s</i>	10 W W
Oakford, W. P. S., <i>Sp. s</i>	1 E M W	Peake, H. D., <i>Sr. a</i>	26 M D
Oberndorf, P. E., <i>So. a</i>	9 S W B	Peale, J. R., <i>g</i>	409 H S
O'Brien, A. de C., <i>Fr. s</i>	66 Nassau St.	Pearl, D., Jr., <i>So. a</i>	9 U
Odell, E. A., <i>g</i>	215 H S	Pearl, W. E., <i>Jr. a</i>	148 Nassau St.
Odell, W. T., <i>So. a</i>	67 U	Pears, T. C., Jr., <i>Fr. a</i>	20 N Ed
Offutt, G. W., <i>So. a</i>	O, U	Peabody, G. R., <i>Jr. a</i>	8 L P
Ogden, B. K., <i>Jr. a</i>	9 B	PEASE, L. F., <i>Lecturer</i> ,	10 Nassau St.
Ogle, A. McC., Jr., <i>Sr. s</i>	33 L	Peckham, P. T., <i>Fr. s</i>	42 Wiggins St.
Olinger, S., <i>g</i>	64 B S	Pelham, A., <i>Sr. s</i>	131 L
Oliver, A. C., Jr., <i>Fr. s</i>	34 U	Pell, R. V., <i>Sr. a</i>	38 L
Olyphant, M., <i>Jr. a</i>	35 U	Penrose, C., <i>Fr. s</i>	33 Edwards Pl.
ORMOND, A. T., <i>Professor</i> ,	276 Nassau St.	Perley, A. P., Jr., <i>Fr. s</i>	90 Nassau St.
Ormond, J. K., <i>So. a</i>	276 Nassau St.	Perry, A. C., <i>Jr. s</i>	7 E M W
Orr, A., Jr., <i>So. s</i>	52 L	Perry, J. M., <i>Jr. s</i>	16 M D
ORRIS, S. S., <i>Professor</i> ,	Absent	Perry, O. H., Jr., <i>So. s</i>	16 M D
Osborn, A. H., <i>Sp. s</i>	53 Univ. Pl.	Peters, E. H., <i>Sr. a</i>	5 S W B
Osborn, A. P., <i>Jr. a</i>	162 L	Petrie, J. J., <i>So. a</i>	16 S W
Osborne, L., <i>Fr. s</i>	16 Van Deventer Av.	Phelan, J., <i>Jr. a</i>	6 E M W
Osbourne, S. E., <i>g</i>	3 Univ. Pl.	PHILLIPS, A. H., <i>Professor</i> ,	Hodge Av.
Otheman, R. C., <i>Fr. s</i>	44 Van Deventer Av.	Phillips, A. S., <i>Jr. a</i>	5 S R
Otis, A. H., <i>Jr. s</i>	5 W B	Phillips, C., <i>g</i>	73 B S
Otis, N. P., Jr., <i>Fr. s</i>	44 Van Deventer Av.	Phillips, C. I., <i>Sr. a</i>	44 L
Ottenheimer, A. M., <i>Sr. a</i>	5 E B	Phillips, MacN. A., <i>So. a</i>	11 S E B
Oves, G. McC., <i>So. a</i>	12 N M R	Phinny, H. B., Jr., <i>Fr. s</i>	36 Wiggins St.
Owen, R. W., <i>Fr. s</i>	11 Dickinson St.	Pierce, H. D., Jr., <i>So. a</i>	75 U
Owsley, H. B., Jr., <i>Sp. s</i>	Mercer Manor	Pierson, A. R., Jr., <i>Fr. s</i>	90 Nassau St.
PACKARD, W. A., <i>Professor</i> ,	College Place	Pierson, H. O., <i>So. a</i>	164 Nassau St.
Palmer, E., <i>s</i>	10 Nassau St.	Pinkus, F. B., <i>Sp. s</i>	53 Univ. Pl.
Palmer, E. A., <i>So. a</i>	K, U	Pires, E. C., <i>g</i>	5 A S
Pardoe, W. D., <i>Jr. s</i>	Tusculum	Pitts, R. S., <i>So. a</i>	69 U
PARIS, G., <i>Instructor</i> ,	11 Bank St.	Plumb, L. J., <i>Sr. s</i>	G, U
Parke, N. G., <i>2d, Fr. s</i>	31 Univ. Pl.	Pogue, H., <i>Sr. s</i>	2 S D
Parker, F., Jr., <i>Fr. a</i>	7 N R	Pogue, J. C., <i>So. s</i>	2 S D
Parker, H. T., <i>Fr. a</i>	77 U	Pogue, S. F., <i>Sr. a</i>	15 U P
Parkin, H. C., <i>Fr. s</i>	14 Van Deventer Av.	Poindexter, U. H., <i>Jr. a</i>	61 L
		Pollard, W. H., <i>Jr. s</i>	73 B
		Pollock, R. D., <i>Fr. s</i>	36 Wiggins St.
		Pond, D. S., <i>Jr. a</i>	81 B

- Poole, A. Jr., *Sr. a* 142 L
 Poppo, F. W., *Fr. s* 36 Wiggins St.
 Porch, C. D., *Sp. s* 7 S W
 Porterfield, A. B., *Fr. s* 15 Dickinson St.
 Potter, A. T., *Sp. s* 42 L
 Pratt, A. D., *Sr. a* 7 W M W
 Pratt, A. D. B., *Sr. a* 7 L P
 Pratt, J. M., *Fr. s* 24 Edwards Pl.
 PRENTICE, W. K., *Ass't. Professor*, 12 Nassau St.
 Presbrey, C. S., *So. s* 19 U
 Pressly, D. P., *g* 19 B S
 Preston, R. S., *g* 3 U
 Preston, W. F., *Sr. s* 83 Prospect Av.
 Preusse, J. W., *fr. s* 68 L
 Price, B. M., *Sr. a* 68 L
 Price, C. B., *So. a* 11 S E B
 PRIEST, G. M., *Instructor*, 5 S E B
 PRIME, W. C., *Professor*, 38 E. 23d St., New York City
 Publ, P. W., *Sr. a* 11 N M R
 Purnell, L. B., *Sr. s* 83 Prospect Av.
 Pyle, J. McA., *So. a* 9 L P
 PYNE, M. T., *Trustee*, Princeton
 Quintard, C. L., *So. a* 7 N W
 Rafferty, E. L., *So. s* 90 Nassau St.
 Ralph, H. W., *So. a* 9 S R
 Rambo, H. S., *g* 103 H S
 Randall, E. B., *Sr. a* 9 M D
 Randolph, G. M. F., *Fr. s* U, U
 Ranken, D. D., *Sr. s* 24 B
 RANKIN, E. M., *Instructor*, 33 Van Deventer Av.
 RANKIN, W. M., *Professor*, Evelyn Pl.
 RAYMOND, G. L., *Professor*, 83 Bayard Lane
 Raymond, H. J., *fr. s* 3 N D
 Raynal, C. E., *g* 309 H S
 Rea, G. B., *Sr. s* 7 S D
 Rea, J. C., *Sr. s* 183 L
 Read, R. J., *Sp. s* 29 Van Deventer Av.
 Ream, E. K., *fr. a* 90 Nassau St.
 Ream, R. C., *Sr. a* 111 L
 Rearick, R. E., *g* 5 E W
 Rebert, C. M., *So. a* 36 N Ed
 Reed, C. F., *g* 26 A S
 Reed, C. H., *Sr. a* 11 N W
 Reed, H. B., *So. s* 38 Wiggins St.
 Reed, J. H., Jr., *Sr. s* 112 L
 Reed, R. R., *Sr. a* 3 W M W
 REED, W. M., *Ass't. Professor*, 14 Prospect Av.
 Rees, B. Le G., *Fr. s* 24 Edwards Pl.
 Reid, S. J., Jr., *So. a* 31 L
 Reinhart, F. O., *fr. a* 15 N D
 Reimers, R. D., *fr. s* 6 N R
 Rendall, H. J., *g* 109 H S
 Rentschler, G. S., *Fr. a* 33 Edwards Pl.
 Rentschler, H. C., *g* 14 N D
 Rentschler, R. P., *So. a* 7 W B
 Reppert, G. H., *So. s* 79 U
 Reynolds, H. B., *Sr. s* 141 L
 Reynolds, O. C., *Sr. a* 23 M D
 Rheinstein, S., *Fr. s* 14 Chambers St.
 Rhodes, H. A., *g* 308 H S
 Rice, H. W., *Fr. s* 2 Nassau St.
 Richard, H. C., *So. a* 4 B
 Richards, A. R., *Fr. a* 7 N M R
 Richards, P., *g* 23 A S
 Richardson, D. W., *g* 66 B S
 Richardson, E., *fr. a* 13 W W
 RICHARDSON, E. C., *Librarian*, 220 Mercer St.
 Richardson, L. K., *Fr. a* 8 S M R
 Richardson, R., *Sr. a* 13 S D
 Richardson, R. B., *So. a* 136 Nassau St.
 Richardson, W. McL., *fr. a* 31 B
 Ridgway, C. D., Jr., *fr. s* 7 B
 Riggs, E. W., *Sr. a* Dodge Hall
 Riggs, J. F., Jr., *Fr. a* 16 Bank St.
 Righter, W. W. N., *So. a* 18 Van Deventer Av.
 Riker, T. W., *g* 14 N D
 Riley, A. W., *Sr. a* 35 L
 Rinehart, R. E., *Sr. a* 1 N M R
 Robards, C. M., *Fr. s* 15 Dickinson St.
 ROBBINS, E. Y., *Professor*, 58 Univ. Pl.
 Robert, C. D., *Sr. a* 154 L
 Robert, D. R., *Fr. s* 22 Edwards Pl.
 ROBINSON, C. A., *Instructor*, 76 Alexander St.
 Robinson, F. E., Jr., *Fr. s* 66 Nassau St.
 Robinson, M. E., *So. s* 42 U
 ROBINSON, P. E., *Instructor*, The Bachelors

Robinson, W. A., <i>Fr. s</i>	Schultz, W. S., <i>Sr. a</i>	12 S W B
11 Dickinson St.	Schwarzschild, M. M., <i>Fr. s</i>	30 U
Roche, C. E., <i>Fr. a</i>	Schwob, H., <i>Sp. a</i>	148 Nassau St.
47 Univ. Pl.	Scott, A. H., <i>Sp. s</i>	C, U
Rockwood, C. G., Jr., <i>Professor,</i>	Scott, A. P., <i>Sr. a</i>	14 W W
34 Bayard Lane	Scott, D., <i>Fr. a</i>	14 W W
Rodgers, W. W., <i>Fr. s</i>	Scott, J. I., <i>Fr. a</i>	19 Univ. Pl.
73 U	Scott, R. F., <i>Fr. s</i>	47 Univ. Pl.
Rogers, L. H., <i>Sr. a</i>	Scott, T. McG., <i>Sr. s</i>	3 W M W
11 N W	Scott, W. B., <i>Professor,</i>	56 Bayard Lane
Rollins, F. B., <i>Sp. a</i>	Scott, W. E. D., <i>Curator,</i>	341 Nassau St.
2 B	Scribner, C. E., <i>Fr. s</i>	61 L
Roosevelt, N. G., <i>Sr. s</i>	Scudder, C. D., <i>Fr. a</i>	44 Van Deventer Av.
184 L	Seeley, P. S., <i>So. a</i>	110 Nassau St.
Root, S. W., <i>Sr. a</i>	Seeton, B. W., <i>So. s</i>	64 U
8 Murray Pl.	Seitz, C. H., <i>Fr. a</i>	30 N Ed
Roper, J. G., <i>Fr. a</i>	Shallies, G. W., <i>g</i>	Lawrenceville, N. J.
10 S D	Sharp, H., <i>Fr. s</i>	29 Van Deventer Av.
Rosenfield, E. A., <i>Fr. s</i>	Sharp, T. R., <i>Fr. s</i>	2 E B
15 Dickinson St.	Shaw, H. N., <i>Fr. a</i>	41 L
Rouse, J. G., <i>Fr. s</i>	Shearer, C. W., <i>Sr. a</i>	64 L
31 B	Sheldon, B., <i>Sr. a</i>	6 S W B
Rowan, T., <i>Sp. a</i>	Shepard, F. N., <i>2 e</i>	10 Nassau St.
40 B S	Sherman, J. Jr., <i>Fr. s</i>	42 Wiggins St.
Rowe, B., <i>Sr. s</i>	SHIELDS, C. W., <i>Professor,</i>	Morven
4 M D	Shipman, J. G., <i>So. a</i>	136 Nassau St.
Rue, J. D., Jr., <i>Fr. s</i>	Shirk, J. H., <i>Fr. s</i>	74 B
21 L	Shirley, R., <i>Fr. a</i>	17 S Ed
Rulon-Miller, J., Jr., <i>Fr. a</i>	Shoemaker, I. L., <i>So. a</i>	10 S E B
6 N D	Shoemaker, J. C., <i>Sr. a</i>	12 S W B
Rulon-Miller, S., <i>Fr. s</i>	Shoemaker, L. B., <i>So. s</i>	1 E M W
19 Univ. Pl.	Short, H. H., <i>Fr. a</i>	2 N D
Russell, A., <i>Sr. a</i>	Sidebotham, R. S., <i>Fr. a</i>	16 Witherspoon St.
79 Alexander St.	Simmons, H. M., <i>So. s</i>	19 U
Rust, J. D., <i>Sp. s</i>	Simons, F. P., <i>So. a</i>	136 Nassau St.
14 Park St.	Simons, G. S., Jr., <i>Sp. s</i>	136 Nassau St.
Rust, J. F., <i>Fr. s</i>	Simpson, C. R., <i>Fr. s</i>	123 L
2 Nassau St.	Simpson, R. S., <i>So. a</i>	16 N W
Ruth, J. N., <i>Fr. a</i>	SILL, H. F., <i>Instructor,</i>	Absent
39 Univ. Pl.	Sill, W. G., <i>Sr. a</i>	41 B
Rutherford, A. H., <i>Fr. a</i>	SILVESTER, C. F., <i>Assistant,</i>	10 N
10 W M W	SINCERBEAUX, C. S., <i>Instructor,</i>	8 S R
Rutter, J. W., <i>Fr. a</i>		H, U
14 B		302 H S
Sabine, S. S., <i>Sr. a</i>		8 S E B
9 W B		
St. John, F. B., <i>Fr. s</i>		
2 U P		
Sammis, T. H., <i>Sr. a</i>		
6 W B		
Sanderson, R., <i>Fr. s</i>		
5 M D		
Sanford, E. S., Jr., <i>Fr. a</i>		
61 B		
Sargent, G. L., <i>Fr. a</i>		
9 N Ed		
Satterwhite, B. O., <i>Sr. a</i>		
161 L		
Savage, H. H., <i>Sr. a</i>		
4 W M W		
Saxton, E. W., <i>g</i>		
307 H S		
Sayen, W. H., Jr., <i>Fr. s</i>		
64 B		
Sayre, H. C., <i>So. s</i>		
62 B		
Sayre, J. N., <i>Fr. a</i>		
39 Van Deventer Av.		
Scarborough, J. I., <i>Sr. a</i>		
10 W B		
Schaeffer, J. H., <i>g</i>		
215 H S		
Schaff, P. H., <i>So. a</i>		
12 W B		
Schaff, S. R., <i>Fr. s</i>		
39 Univ. Pl.		
Schmitz, W. L., <i>Fr. s</i>		
12 W W		
Schmuck, A. J. C., <i>Fr. s</i>		
53 Univ. Pl.		
Schoonmaker, L. M., <i>Sr. s</i>		
4 M D		
Schoonmaker, W. J., <i>Fr. s</i>		
33 Edwards Pl.		
Schumaker, I. R., <i>Fr. a</i>		
16 Chambers St.		
Schultz, C. K., <i>Fr. a</i>		
21 N Ed		
Schussler, W. F., <i>Fr. s</i>		
199 Nassau St.		

Slaughter, R. B., <i>fr. a</i>	153 L	STEWART, J. A., <i>Trustee,</i>	
Sloan, A. K., <i>Fr. a</i>	6 N M R	New York City	
Sloan, R. R., <i>fr. s</i>	A, B	Stewart, J. A., 3d, <i>fr. a</i>	186 L
Sloane, F. J., <i>Fr. s</i>	38 U	Stewart, V., <i>fr. a</i>	43 B
Sloane, G., <i>Fr. a</i>	27 N Ed	Stickney, H., <i>So. s</i>	20 W W
Smith, A. A., <i>Sr. a</i>	64 L	Stites, J. H., <i>So. a</i>	266 Nassau St.
Smith, C. C., <i>Fr. s</i>	138 Nassau St.	Stockton, B., Jr., <i>So. a</i>	Morven
Smith, C. F., <i>Fr. a</i>	12 N Ed	Stokes, R. J., <i>Sr. s</i>	8 S W B
Smith, C. N., <i>Fr. a</i>	F, W B	Stone, W. R., <i>Sr. a</i>	240 Nassau St.
Smith, F. C., <i>Sr. s</i>	3 S M R	Stoutenburgh, R. B., <i>Sp. a</i>	
Smith, F. N., <i>Fr. a</i>		172 Nassau St.	
	38 Washington Road	Stowell, W. A., <i>Sr. a</i>	46 U
Smith, H. C., <i>Sr. a</i>	111 L	Strater, C. H., <i>So. a</i>	86 Nassau St.
Smith, H. D., <i>So. a</i>	97 B	Stratton, B. F., <i>Fr. s</i>	20 A S
Smith, H. J., <i>So. s</i>	4 W M W	Stratton, H. M., <i>fr. a</i>	2 E M W
SMITH, H. S. S., <i>Professor,</i>	4 E W	Stratton, P., <i>g</i>	20 A S
Smith, J. H., <i>Fr. a</i>	172 L	Streubel, C. E., <i>g</i>	403 H S
Smith, K. G., <i>Sr. s</i>	111 L	Stromberg, C. M., <i>So. s</i>	8 E B
Smith, L. C., <i>Fr. a</i>	26 Edwards Pl.	STROMQUIST, C. E., <i>Instructor,</i>	
Smith, S. M., <i>So. a</i>	P, U	27 Madison St.	
Smith, W. K., <i>Fr. s</i>	14 Park St.	Stromsten, F. A., <i>g</i>	43 U
Sohmer, H. J., <i>Fr. a</i>	19 Univ. Pl.	Strong, A. McL., <i>Sr. a</i>	3 E B
Sousa, J. P., Jr., <i>Sp. s</i>	66 L	Struve, F. A., <i>Fr. s</i>	138 Nassau St.
South, A. L., <i>g</i>	41 B S	Sturdevant, E. W., Jr., <i>Sr. a</i>	7 E B
Spangler, J. W., <i>fr. a</i>	15 S W	Stutesman, J. H., <i>fr. a</i>	11 N D
Spaulding, F. D., <i>Sp. s</i>	18 W W	Sullivan, P. B., <i>So. a</i>	19 S M R
Spear, J., Jr., <i>g</i>	Washington Road	Sulzberger, G. S., <i>Fr. s</i>	
Spelletich, K., <i>So. s</i>	62 B	34 Van Deventer Av.	
Spencer, F. N., <i>fr. s</i>	11 N D	Sunstein, E., <i>So. a</i>	46 L
Spencer, J. C., <i>Fr. a</i>	47 Univ. Pl.	Sutton, C. K., <i>fr. a</i>	73 Stockton St.
Spohn, G. S., <i>So. a</i>	32 N Ed	Swan, A. L., <i>So. s</i>	11 E B
Squire, A. B., <i>Sp. s</i>	37 Wiggins St.	Swan, H., <i>fr. s</i>	53 L
Stafford, H. I. N., <i>fr. a</i>	122 L	Swan, W. W., <i>Sp. s</i>	15 Dickinson St.
Stagg, D. C., <i>So. s</i>	20 N W	Swann, C. I., <i>Sr. s</i>	5 N M R
Stainback, I. M., <i>Fr. a</i>	9 N M R		
Stanley, E. O., Jr., <i>So. a</i>	5 N W	Taggart, A. L., <i>Sr. s</i>	33 L
Steele, L. S., <i>Fr. a</i>	53 Univ. Pl.	Takahashi, M., <i>g</i>	5 S E
Steen, J. E., <i>g</i>	Dodge Hall	Talbott, A. F. M., <i>So. s</i>	64 U
Steinbach, J., Jr., <i>Sr. a</i>	163 L	Taliaferro, C. C., Jr.,	39 Univ. Pl.
Stephenson, G. T., <i>Fr. s</i>		Taplin, H. W., <i>Sp. s</i>	148 Nassau St.
	138 Nassau St.	Tappan, D. S., Jr., <i>g</i>	3 B S
Sterritt, R. J., <i>Fr. a</i>	1 S D	Tarbell, S., <i>So. s</i>	1 N W
Stevens, C. G., <i>Sr. s</i>	181 L	Telford, H. McG., <i>Sr. a</i>	3 S Ed
Stevens, R. D., <i>Sr. a</i>	68 Univ. Pl.	Tenney, H. S., <i>Fr. s</i>	15 Univ. Pl.
Stevens, W. L., <i>fr. a</i>	23 B	Terry, J. L., <i>fr. a</i>	10 E B
Stevens, W. M., <i>Sr. a</i>	72 L	Thacher, J. C. B., 2d, <i>Sr. a</i>	143 L
Stevenson, T. K., <i>fr. s</i>		Thayer, L. C., Jr., <i>Sp. s</i>	
	20 Library Pl.	168 Nassau St.	
Stevenson, W. W., <i>fr. s</i>	34 B	THOMAS, D. L., <i>Instructor,</i>	6 S D
Stewart, B. G., Jr., <i>So. a</i>	9 N W	Thomas, J. G., <i>Fr. s</i>	33 Edwards Pl.
STEWART, G. B., <i>Trustee,</i>		Thomas, N. M., <i>fr. a</i>	2 N R
	Auburn, N. Y.	Thomas, W. L., <i>Fr. s</i>	36 Univ. Pl.
Stewart, G. P., <i>Sr. a</i>	4 W W	Thompson, C. D., <i>fr. a</i>	95 B

THOMPSON, H. D., <i>Professor</i> , 11 Morven St.	Vandewater, W. C., <i>Fr. a</i> 45 Van Deventer Av.
Thompson, H. S., <i>So. s</i> Kingston, N. J.	Van Doren, W. V., <i>Fr. a</i> 30 S Ed
THOMPSON, J. MacN., <i>Curator</i> , University Offices	Van Duyn, W., <i>Sr. s</i> 10 S M R
Thomson, McL., <i>So. a</i> 36 L	Van Dyke, A. D., <i>Sp. s</i> 108 Mercer St.
Timmons, W. M., <i>Fr. a</i> 45 Univ. Pl.	VAN DYKE, H., <i>Professor</i> , 59 Bayard Lane
Tittmann, C. T., <i>Fr. s</i> 14 N W	VAN DYKE, H. N., <i>Registrar</i> , University Offices
Tobey, E. D., <i>Fr. s</i> 13 B	VAN DYKE, P., <i>Professor</i> , 89 Library Pl.
Tooker, N. B., <i>So. a</i> 8 W W	VAN INGEN, G., <i>Assistant</i> , 8 Maple St.
TOPLEY, J. W., <i>Proctor</i> , 32 Wiggins St.	VAN NEST, J. S., <i>Instructor</i> , 29 Bank St.
Topping, H. J., <i>Fr. s</i> 138 Nassau St.	VAN RENSSELAER, A., <i>Trustee</i> , Philadelphia, Pa.
Townsend, B. E., <i>So. a</i> 266 Nassau St.	Van Sant, R. M., <i>Fr. a</i> 13 N W
Townsend, E. D., <i>Fr. s</i> 2 M D	Vauclain, J. L., <i>So. s</i> 110 Nassau St.
Townsend, T. G., Jr., <i>Sr. s</i> 171 L	Vaughan, D. C., <i>So. a</i> 5 L P
Trace, J. M., <i>So. a</i> 1 M D	Vaughan, R. G., <i>So. a</i> 18 Van Deventer Av.
Treat, E. B., <i>g</i> 11 B	Van Valzah, R., <i>Sr. a</i> 8 E M W
Trent, E. K., <i>Fr. a</i> 10 S D	Van Zandt, H., <i>So. s</i> Lawrenceville, N. J.
Triplett, G. H., <i>g</i> 58 B S	Veit, R. C., <i>So. s</i> 18 E W
Trone, R. E., <i>Fr. a</i> 2 S M R	Venable, E. C., Jr., <i>So. a</i> 31 Nassau St.
Truesdale, J. R., <i>Sr. s</i> 54 L	Vetterlein, J. R., <i>Fr. s</i> 2 N W
TUCKERMAN, B., <i>Lecturer</i> , 65 B	Vondermuhll, G. A., <i>Sr. a</i> 9 W B
Turnbull, E. J., <i>Sr. s</i> 3 E B	von Krug, K. L., <i>g</i> 211 H S
Turner, R. B., <i>Fr. s</i> 90 Nassau St.	Von Weise, L. B., <i>Fr. s</i> 47 Univ. Pl.
Turner, W. F., <i>Sp. s</i> 31 Nassau St.	Voorhees, C. I., <i>So. a</i> 36 L
Tuttle, F. H., <i>Fr. s</i> 168 Nassau St.	Voorhees, J. D., <i>Fr. s</i> 144 L
Tweedy, L. L., <i>Fr. s</i> 53 L	VREELAND, W. U., <i>Ass't. Professor</i> , Mercer Heights
Ulman, R. L., <i>So. s</i> 34 Van Deventer Av.	Wade, S. F., <i>Fr. a</i> 8 N R
Ullmann, F., Jr., <i>So. a</i> 5 B	Waggaman, F. P., <i>Sp. s</i> 82 B
Underhill, W. H., <i>Sr. a</i> 41 Prospect Av.	Waggaman, T. E., <i>Fr. s</i> 82 B
Untermeyer, A., <i>Sr. a</i> 16 W W	Wagner, D. E., <i>Sr. a</i> 2 S W B
Updegraff, D. B., <i>g</i> 30 A S	Waite, J. R., <i>Fr. a</i> 25 N Ed
Updegraff, S., <i>So. s</i> 148 Nassau St.	Walcott, C. H., <i>Fr. s</i> 64 B
Uptegrove, G. M., <i>So. a</i> 148 Nassau St.	Walker, E. W., <i>Fr. a</i> 39 Van Deventer Av.
Upton, C. P., <i>Fr. s</i> 2 U P	Walker, G. A., Jr., <i>Fr. a</i> 18 N Ed
Upton, F. R., <i>Fr. a</i> 36 Univ. Pl.	Walker, H. B., <i>So. a</i> 44 U
Urban, P. L., <i>So. a</i> 16 S W	Walker, O. K., <i>g</i> 408 H S
Van Camp, C., Jr., <i>Sp. s</i> 31 Univ. Pl.	Waller, J. C., <i>So. s</i> 15 S D
Vanderbilt, O. DeG., Jr., <i>So. s</i> 12 U	Wallin, I. E., <i>Sp. s</i> 166 Nassau St.
Vanderhoef, F. B., <i>Sr. s</i> 83 Prospect Av.	
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